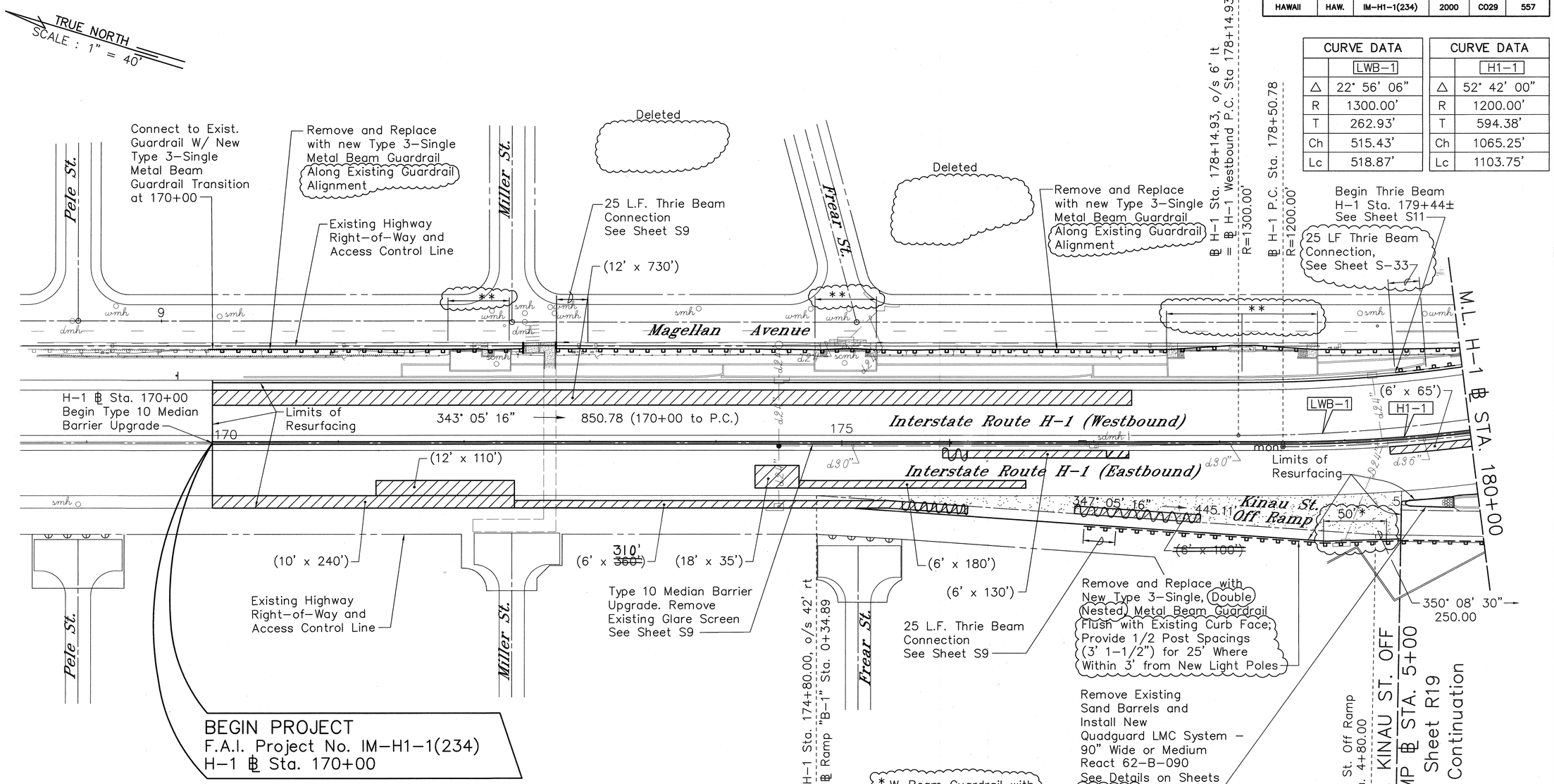
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	C029	557

CURVE DATA	
	LWB-1
△	22° 56' 06"
R	1300.00'
T	262.93'
Ch	515.43'
Lc	518.87'

CURVE DATA	
	H1-1
△	52° 42' 00"
R	1200.00'
T	594.38'
Ch	1065.25'
Lc	1103.75'



** Locate Guardrail Posts Minimum of 18" from Face of Retaining Wall; Provide 1/2 Post Spacings (3'-1 1/2") and Double Nest as Required. Also, Provide 4' Wide by 4' High Pedestrian Gates with Fork Latches and Locks and 2 Gate Posts to Block Stairwells to Observation Decks.
Note for Maintenance: Remove Top and Bottom Male Strap Hinges to Remove Gate to Gain Access to Observation Decks, as Required.

* W-Beam Guardrail with Rubrail; Extend Rubrail 12'-6" on Each Side, All in Accordance with Details on Sheet B-6 25'-0" Double Nested W-Beam Guardrail at Catch Basin, See Detail B SD25A

o Existing Utility/Drain Manhole Frames and Covers to Remain

ROTATED: 73° 11' 04.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-08A
PM: BST
OPER: SHA,TFAI
REVISED: 10/23/00

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No. | DATE

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R1 OF 34 SHEETS

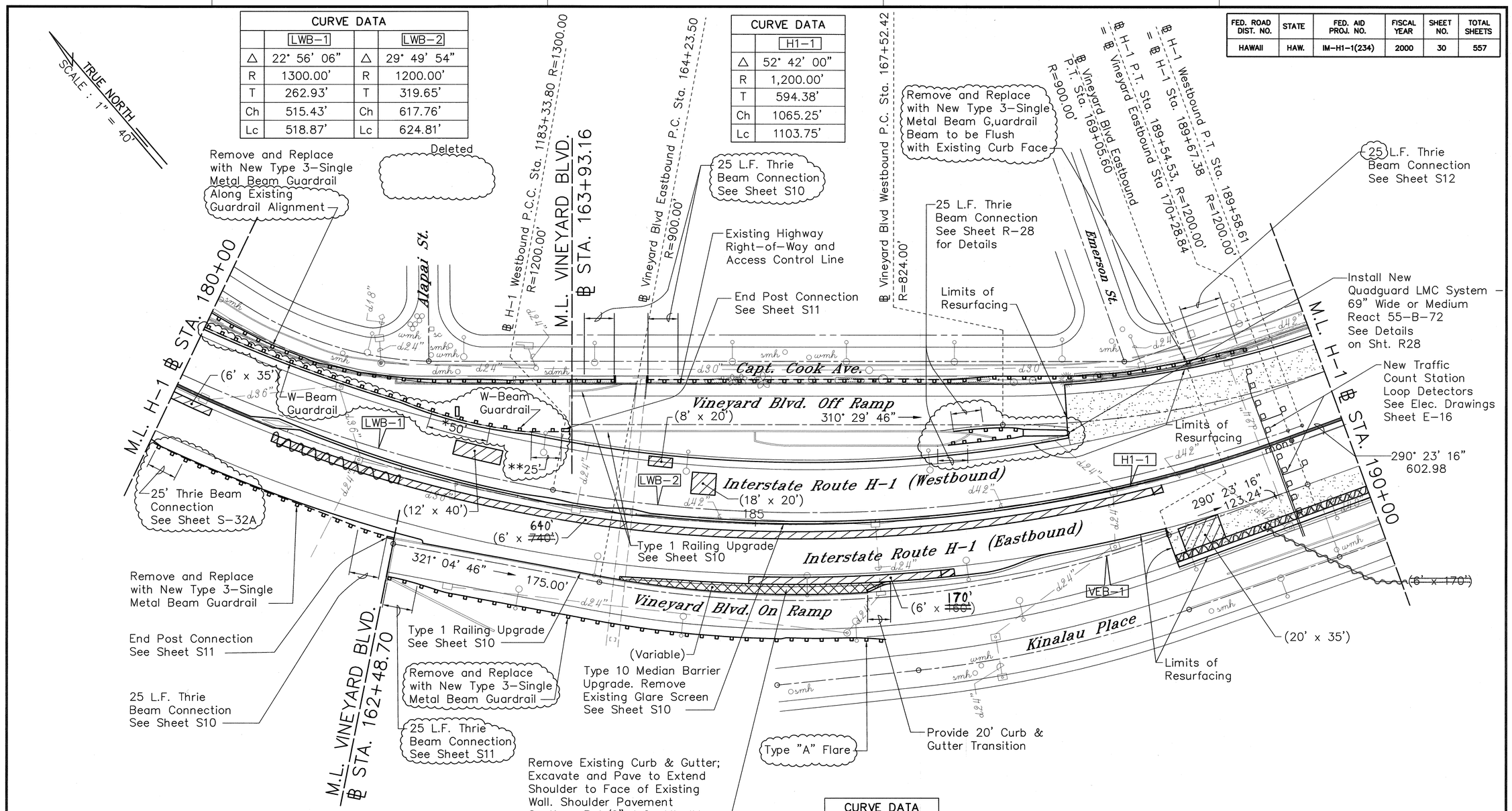
"AS-BUILT"

CO 29

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	30	557

CURVE DATA			
	LWB-1		LWB-2
△	22° 56' 06"	△	29° 49' 54"
R	1300.00'	R	1200.00'
T	262.93'	T	319.65'
Ch	515.43'	Ch	617.76'
Lc	518.87'	Lc	624.81'

CURVE DATA	
	H1-1
△	52° 42' 00"
R	1,200.00'
T	594.38'
Ch	1065.25'
Lc	1103.75'



CURVE DATA	
	VEB-1
△	30° 41' 00"
R	900.00'
T	246.98'
Ch	476.36'
Lc	482.10'

* W-Beam Guardrail with Rubrail; Extend Rubrail 12'-6" on Each Side, All in Accordance with Details on Sheet B-6

** Thrie Beam Connection, See Sheet S-33

ROTATED: 40° 35' 34.08" AT 0,0

DATE: 6/17/98
SCALE: 1" = 40'
FILE: 9815-09

PW: BST
OPER: SHA,*FALBTY
REVISED: 10/23/00

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

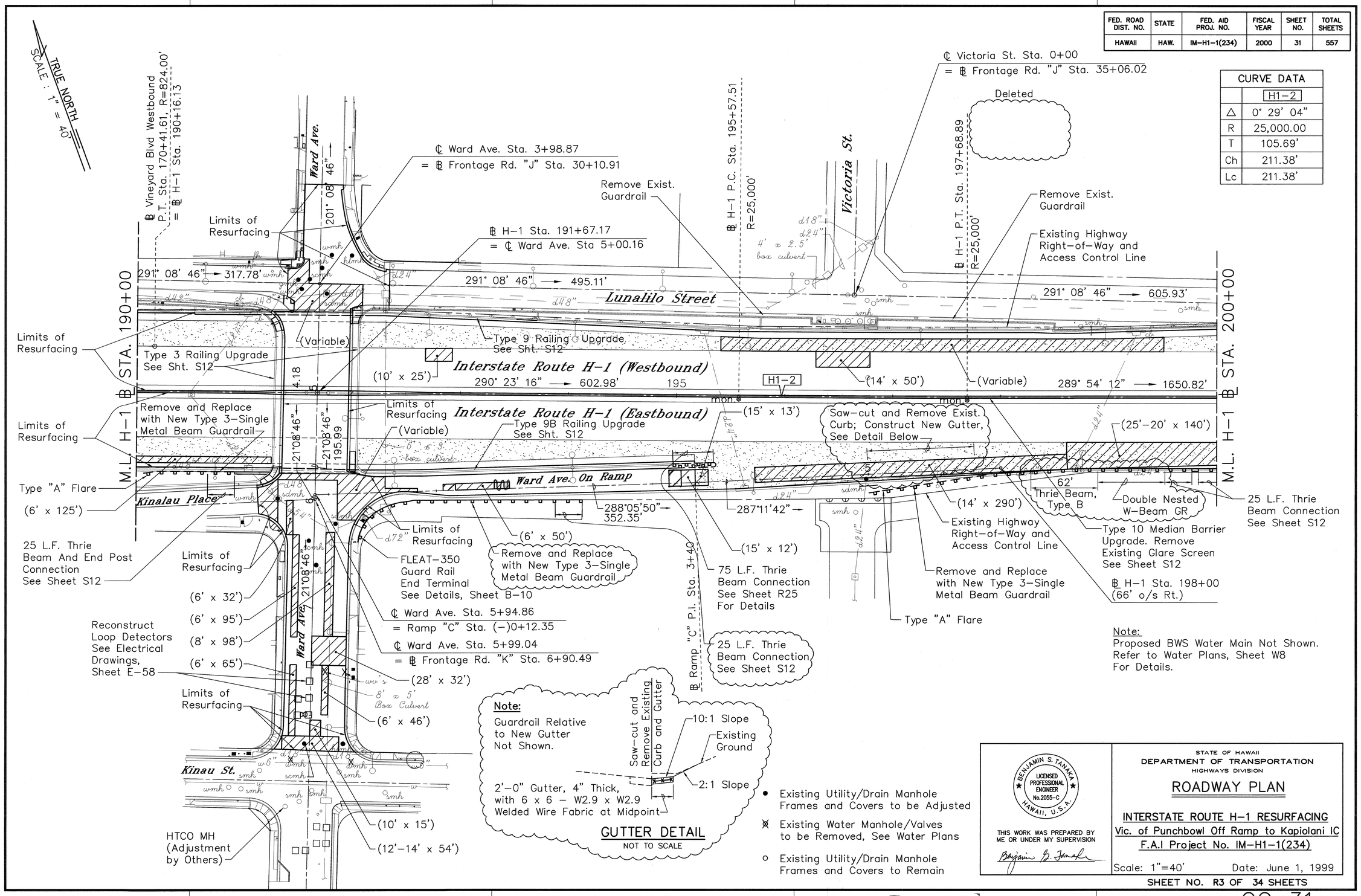
Scale: 1"=40' Date: June 1, 1999

SHEET NO. R2 OF 34 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	31	557

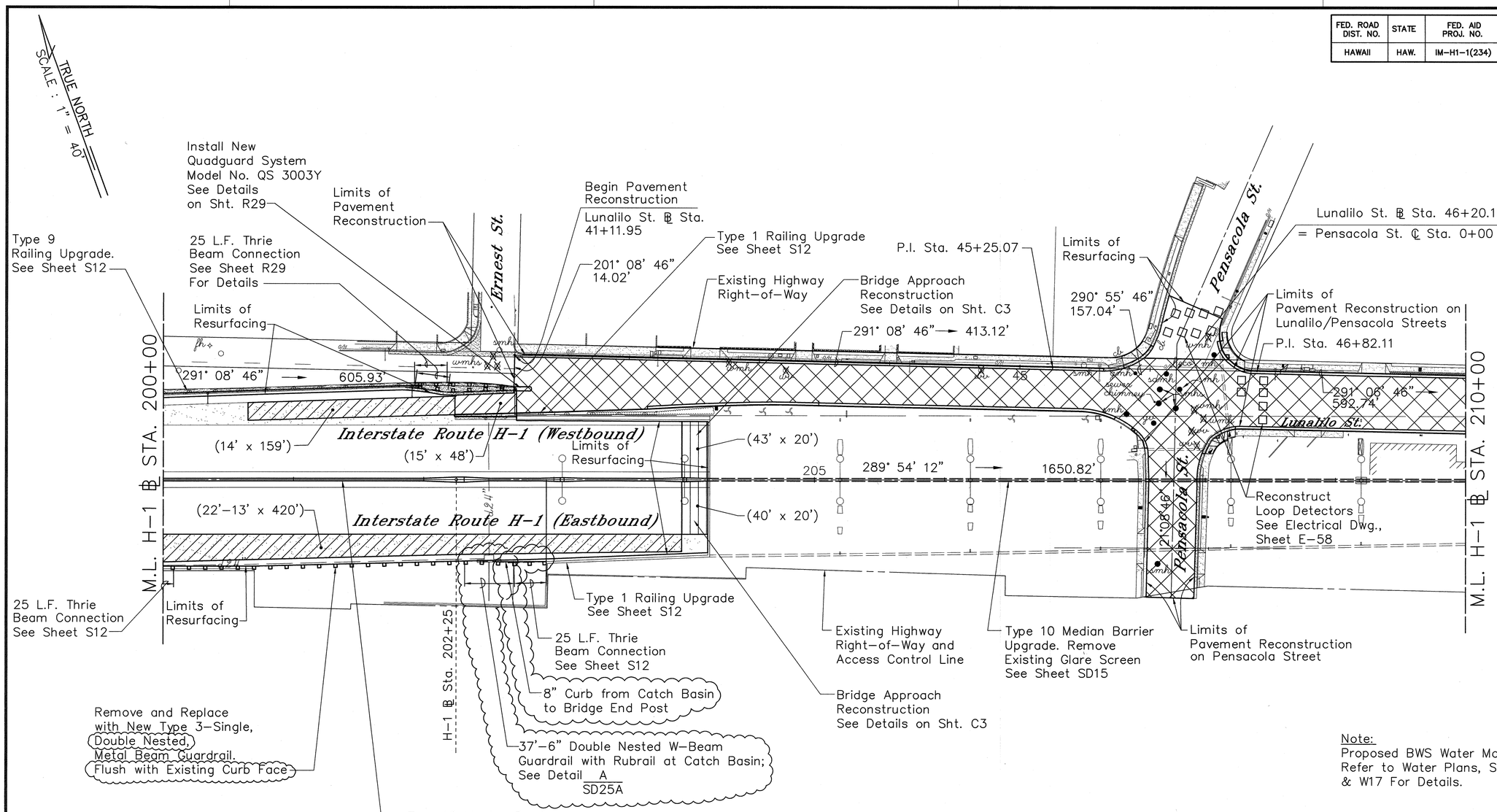
CURVE DATA	
	H1-2
Δ	0° 29' 04"
R	25,000.00
T	105.69'
Ch	211.38'
Lc	211.38'



"AS-BUILT"

CO 31

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	32	557



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W9, W10 & W17 For Details.

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

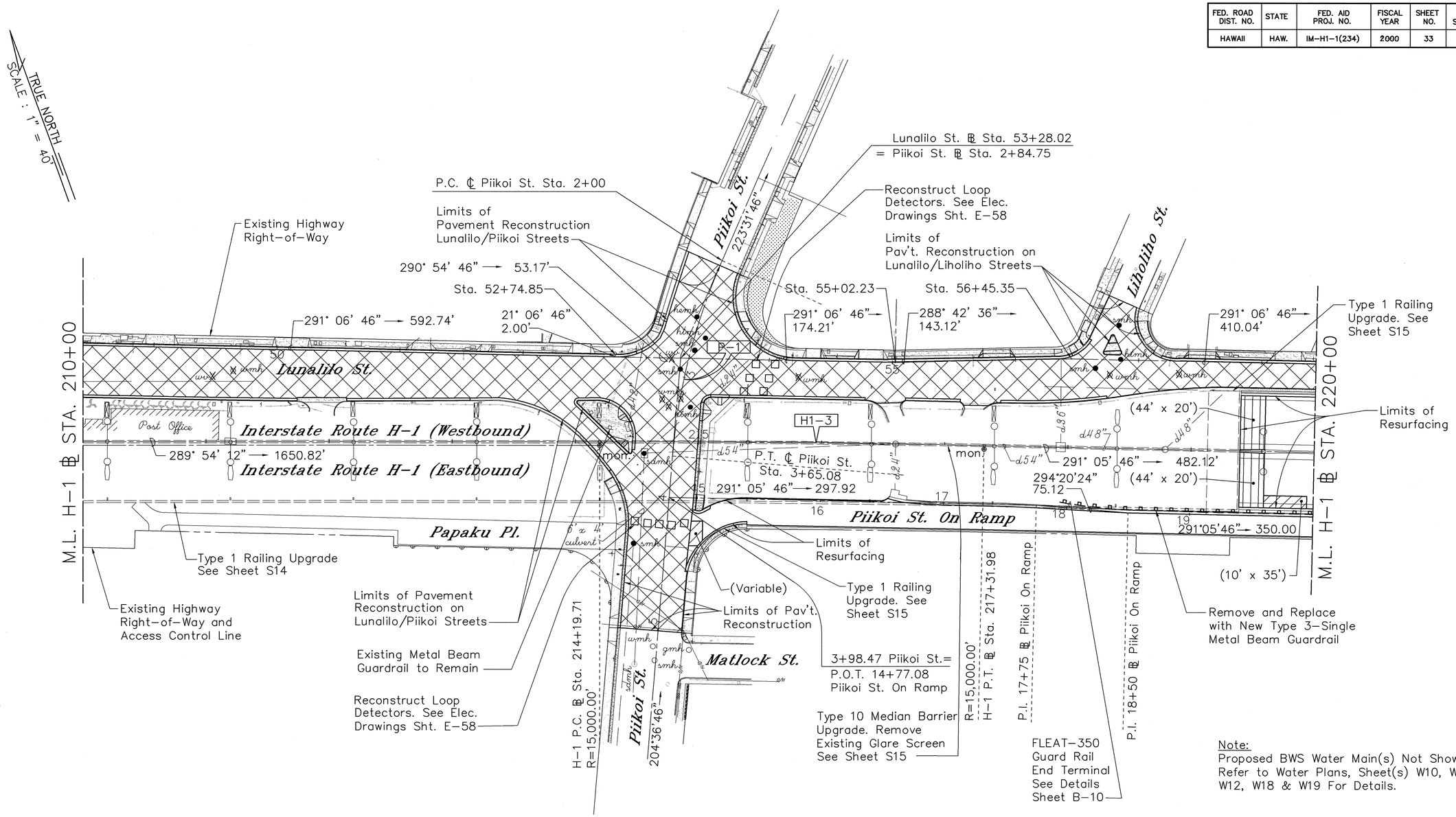
SHEET NO. R4 OF 34 SHEETS

ROTATED: 20° 00' 0.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-11
PM: BST
OPER: SHA,*FAI
REVISED: 09/28/00

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK No.

CO 32

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	33	557



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W10, W11, W12, W18 & W19 For Details.

CURVE DATA	
	H1-3
Δ	1° 11' 34"
R	15,000.00'
T	156.14'
Ch	312.26'
Lc	312.27'

CURVE DATA	
	P-1
Δ	18° 55' 00"
R	500.00
T	83.30
Ch	165.08
Lc	164.33

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

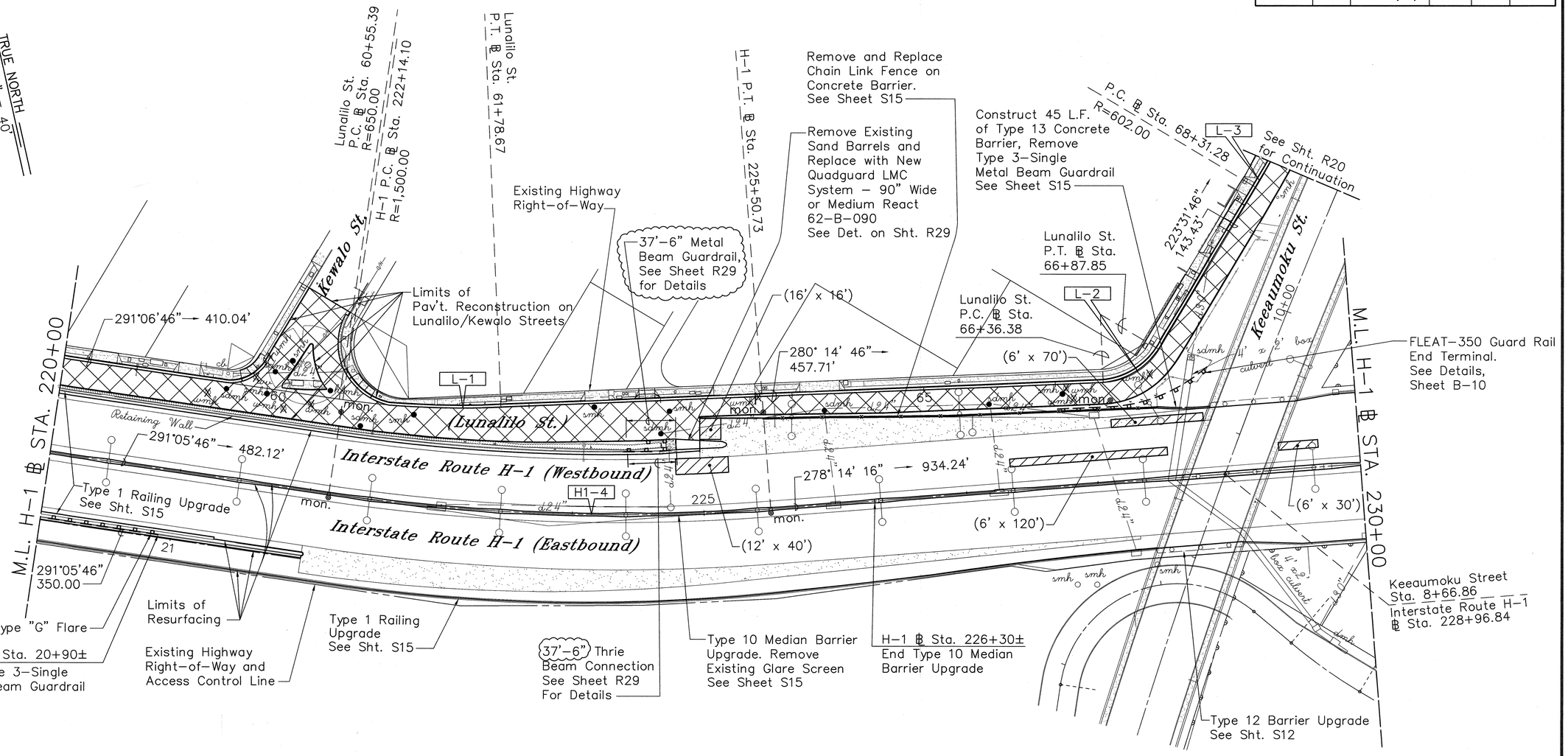
Scale: 1"=40' Date: June 1, 1999

SHEET NO. R5 OF 34 SHEETS

ROTATED: 20° 00' 0.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-12
PM: BST
OPER: SHA,*FAI
REVISED: 05/11/99

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	34	557



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W12, W13 & W14 For Details.

CURVE DATA				
	H1-4	L-1	L-2	L-3
△	12° 51' 30"	10° 52' 00"	56° 43' 00"	7° 17' 51"
R	1,500.00'	650.00'	52.00'	602.00'
T	169.03'	61.82'	28.07'	38.39'
Ch	335.92'	123.09'	49.40'	76.62'
Lc	336.63'	123.28'	51.47'	76.67'

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R6 OF 34 SHEETS

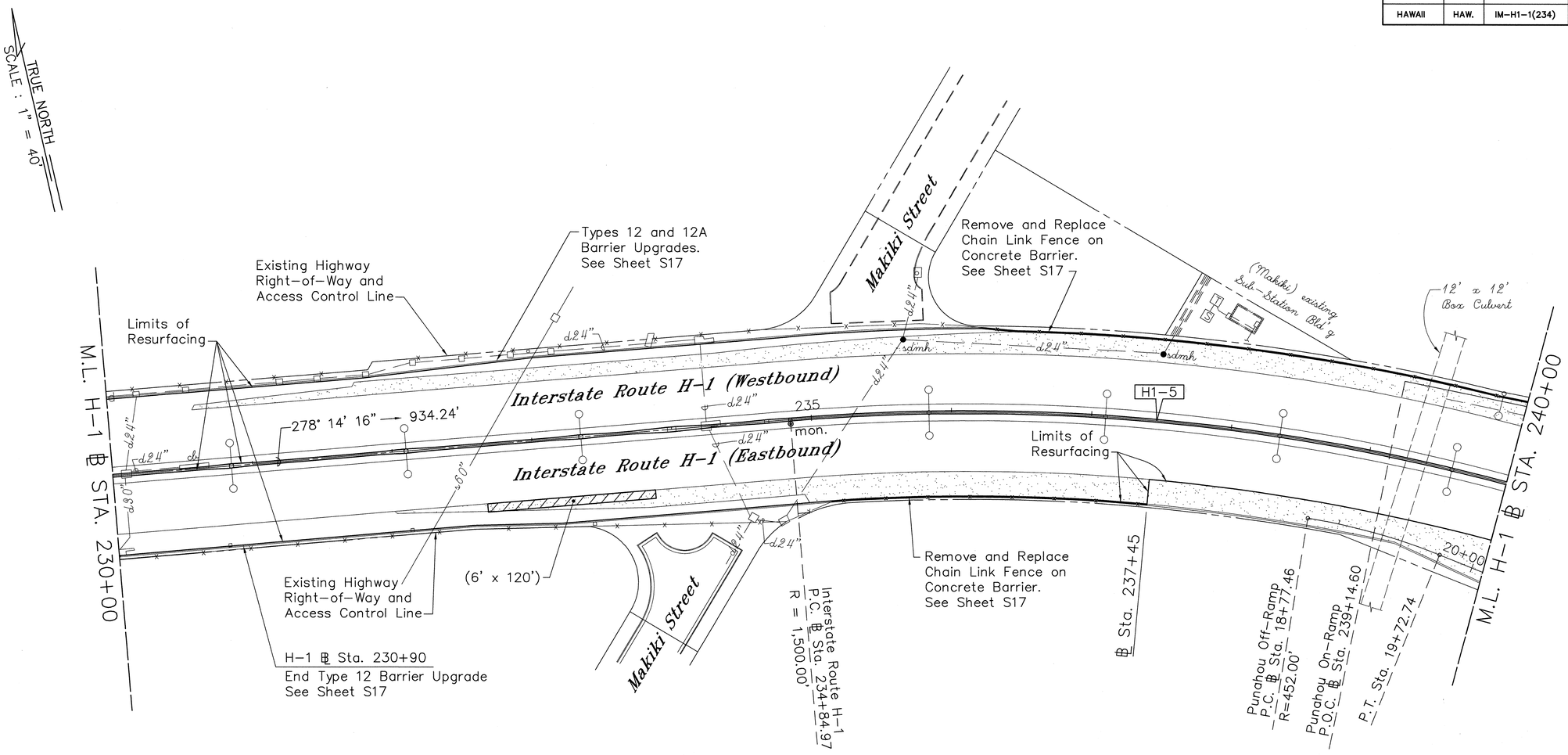
ROTATED: 12° 47' 55.1" AT 0,0
DATE: 6/17/98
SCALE: 1" = 40'
FILE: 9815-13
PM: BST
OPER: SHA *FAI
REVISED: 10/03/00

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No.

"AS-BUILT"

CO 34

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	35	557



CURVE DATA	
	H1-5
Δ	26° 34' 30"
R	1,500.00'
T	354.24'
Ch	689.51'
Lc	695.73'

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA ★ LICENSED PROFESSIONAL ENGINEER No.2055-C ★ HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC

F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R7 OF 34 SHEETS

ROTATED: 13° 04' 48.97" AT 0,0

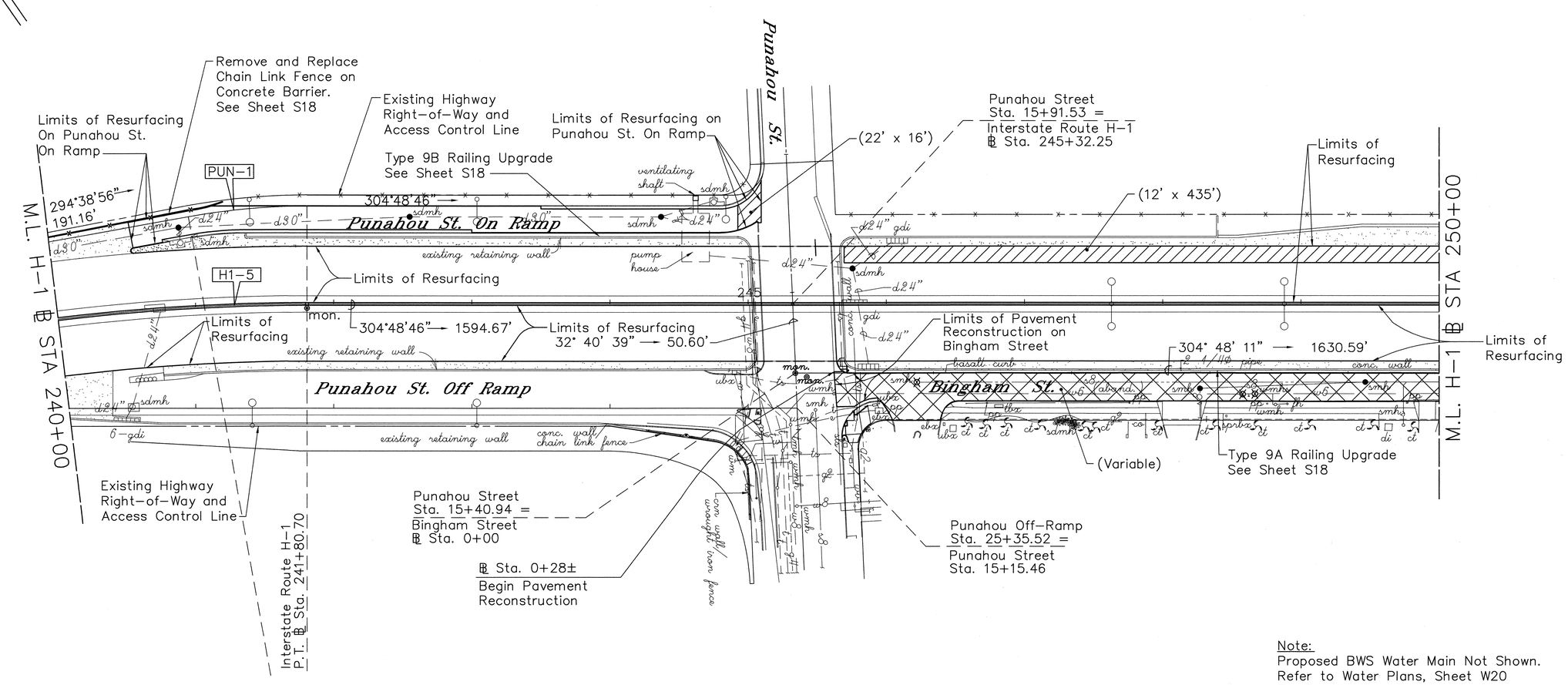
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-14

PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTEBOOK	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	36	557

TRUE NORTH
SCALE : 1" = 40'



Note:
Proposed BWS Water Main Not Shown.
Refer to Water Plans, Sheet W20
For Details.

CURVE DATA	
	H1-5
Δ	26° 34' 30"
R	1,500.00'
T	354.24'
Ch	689.51'
Lc	695.73'

CURVE DATA	
	PUN-1
Δ	10° 09' 50"
R	487.82'
T	43.38'
Ch	86.42'
Lc	86.54'

- • Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

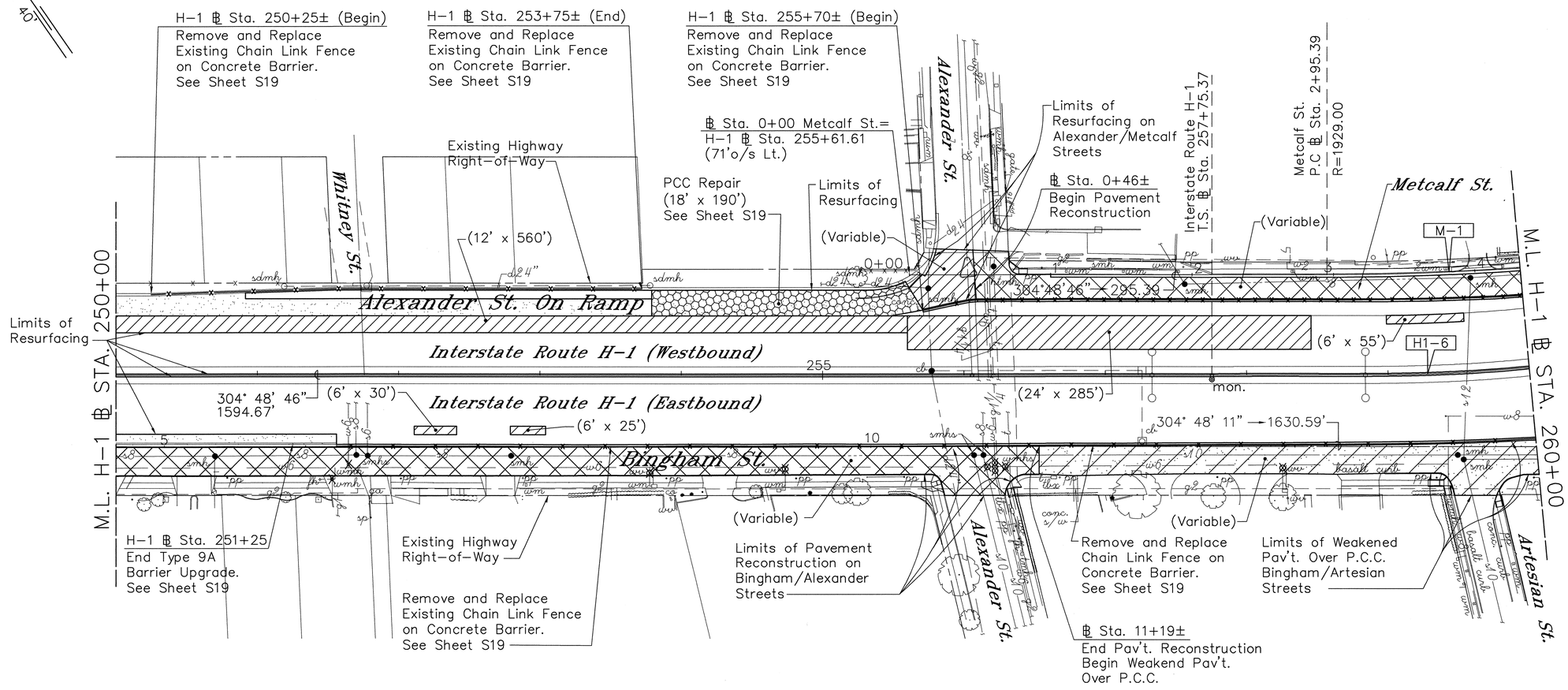
SHEET NO. R8 OF 34 SHEETS

ROTATED: 34° 52' 0.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-15
PM: BST
OPER: SHA.*FAI
REVISED: 05/03/99

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	37	557

TRUE NORTH
SCALE : 1" = 40'



Note:
Proposed BWS Water Main(s) Not Shown.
Refer to Water Plans, Sheet(s) W20, W21, W22 & W28 For Details.

CURVE DATA	
	M-1
△	12° 09' 15"
R	1929.00'
T	205.37'
Ch	408.43'
Lc	409.20'

SPIRAL CURVE DATA	
	H1-6
Θ	4° 22' 30"
Ls	250.00'
Ts	321.34'
LT	166.72'
ST	83.38'
LC	249.94'

- • Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

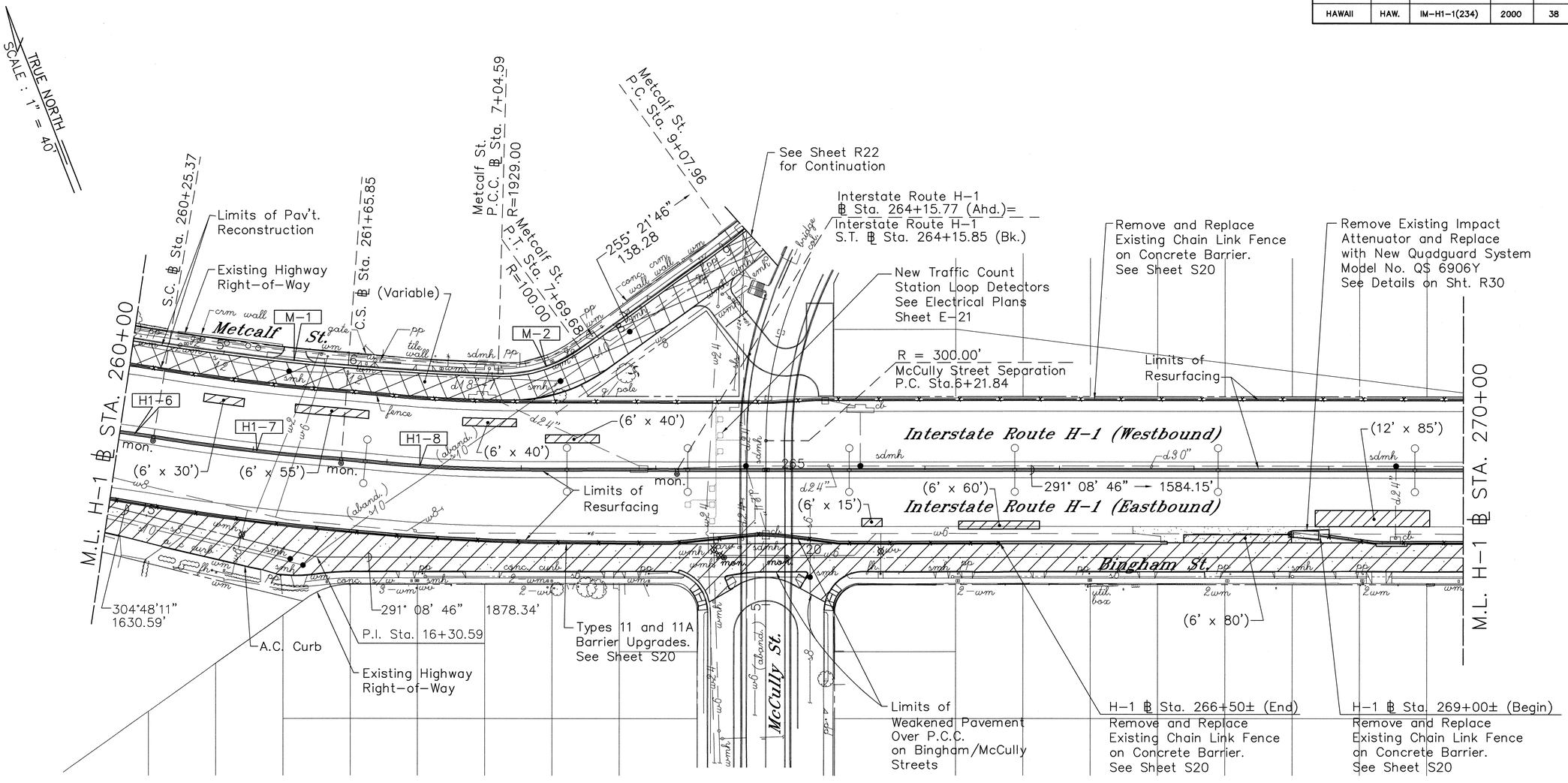
Scale: 1"=40' Date: June 1, 999

SHEET NO. R9 OF 34 SHEETS

ROTATED: 34° 52' 0.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-16
PM: BST
OPER: SHA,*FAI
REVISED: 05/20/99

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
NOTEBOOK
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	38	557



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W22, W23, W24, W25, W28, W29 & W30 For Details.

CURVE DATA	
	H1-7
Δ	4° 55' 00"
Dc	3° 30' 00"
Tc	70.28'
Lc	140.48'
Ch	140.48'

SPIRAL CURVE DATA		
	H1-6	H1-8
θ	4° 22' 30"	4° 22' 30"
Ls	250.00'	250.00'
Ts	321.34'	321.84'
LT	166.72'	166.72'
ST	83.38'	83.38'
LC	249.94'	249.94'

CURVE DATA		
	M-1	M-2
Δ	12° 09' 15"	37° 17' 45"
R	1929.00'	100.00'
T	205.37'	33.75'
Ch	408.43'	63.95'
Lc	409.20'	65.09'

- • Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

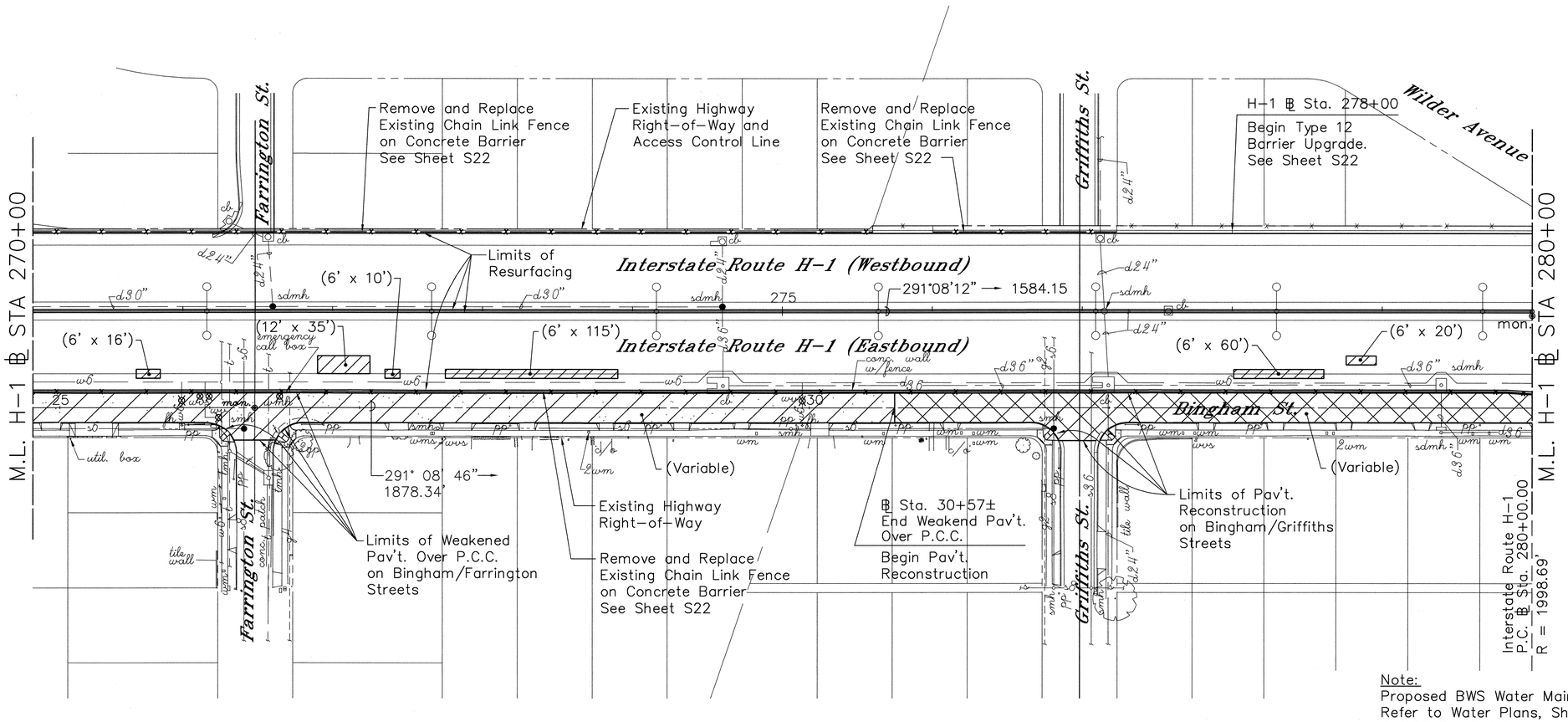
SHEET NO. R10 OF 34 SHEETS

ROTATED: 21° 12' 00" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-17
PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	39	557

TRUE NORTH
SCALE : 1" = 40'



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W25, W26 & W27 For Details.

- Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- Existing Water Manhole/Valves to be Removed, See Water Plans
- Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

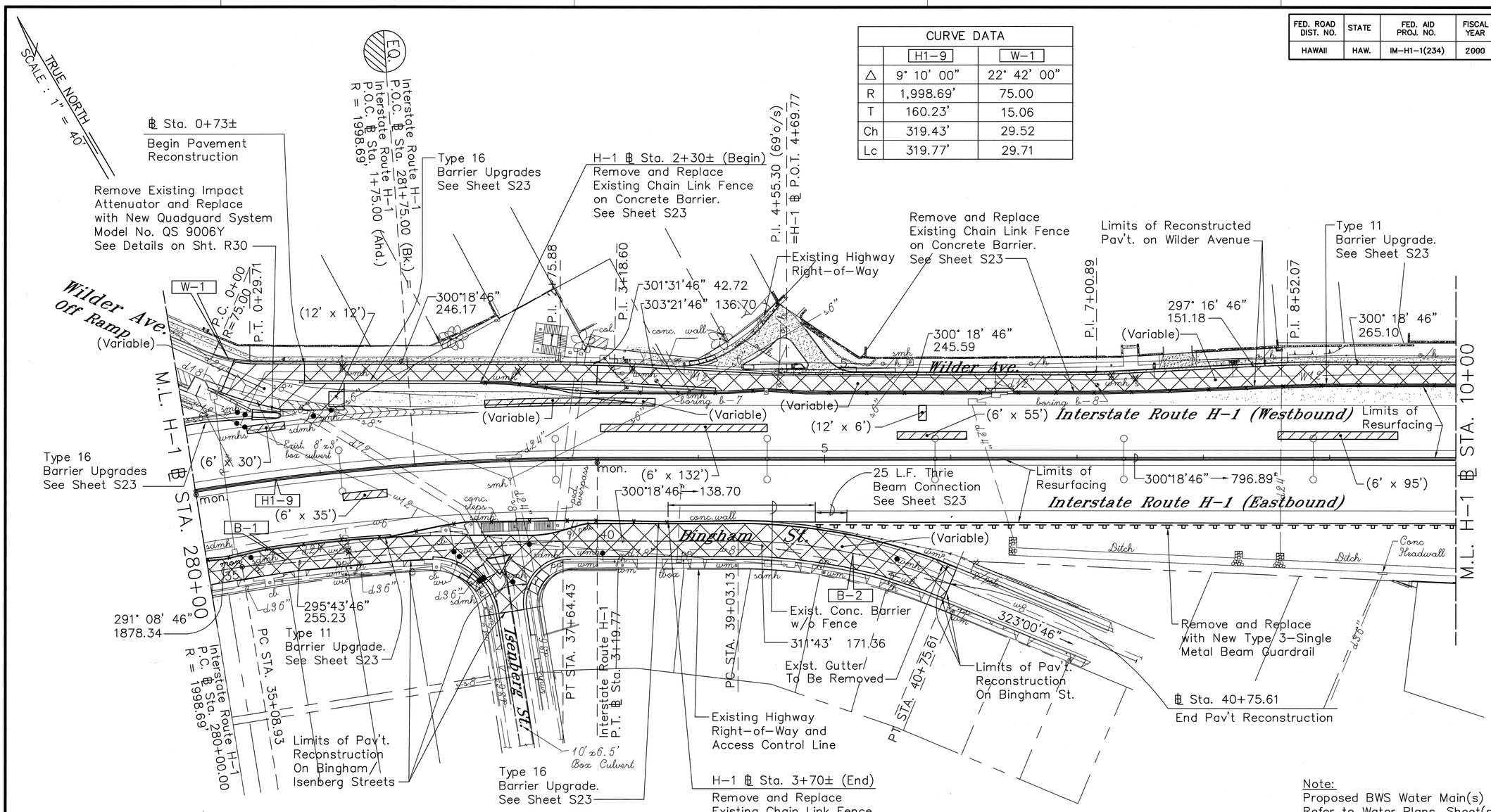
SHEET NO. R11 OF 34 SHEETS

ROTATED: 21° 12' 00" AT 0,0
DATE: 6/17/98
SCALE: 1" = 40'
FILE: 9815-18
P.M: BST
OPER: SHA *FAI
REVISED: 05/03/99

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTEBOOK	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	40	557

CURVE DATA		
	H1-9	W-1
Δ	9° 10' 00"	22° 42' 00"
R	1,998.69'	75.00
T	160.23'	15.06
Ch	319.43'	29.52
Lc	319.77'	29.71



CURVE DATA		
	B-1	B-2
Δ	9° 10'	22° 42'
R	1597.00	435.35
T	128.02	87.39
Ch	255.23	171.36
Lc	255.50	172.48

Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W27, W33, W34 & W35 For Details.

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R12 OF 34 SHEETS

ROTATED: 30° 21' 59.98" AT 0,0
DATE: 6/17/98 SCALE: 1 = 40 FILE: 9815-19
PM: BST OPER: SHA,+FAI REVISED: 05/03/99

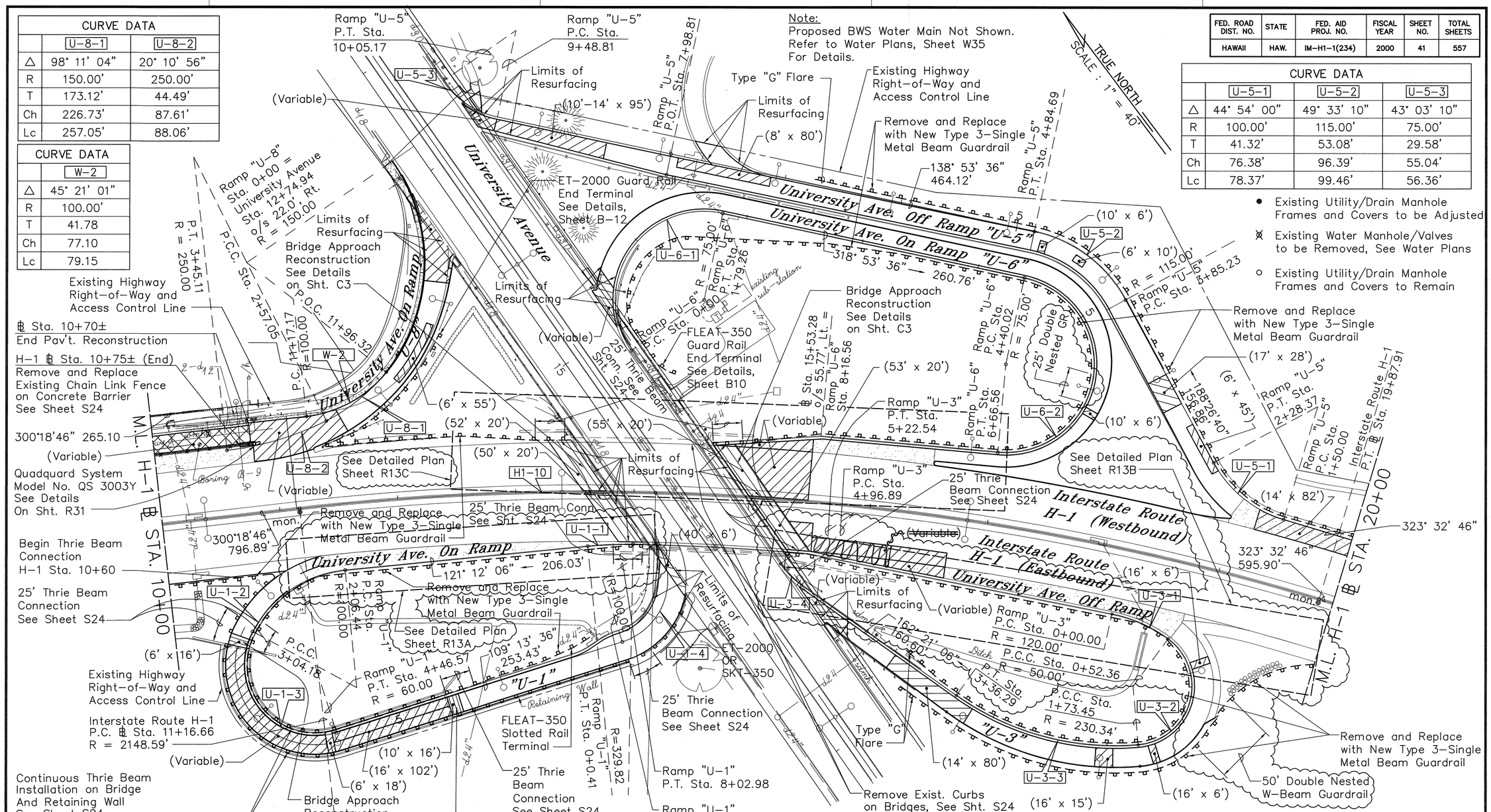
ORIGINAL PLAN | NOTEBOOK | No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	41	557

CURVE DATA		
	U-8-1	U-8-2
△	98° 11' 04"	20° 10' 56"
R	150.00'	250.00'
T	173.12'	44.49'
Ch	226.73'	87.61'
Lc	257.05'	88.06'

CURVE DATA	
	W-2
△	45° 21' 01"
R	100.00'
T	41.78
Ch	77.10
Lc	79.15

CURVE DATA			
	U-5-1	U-5-2	U-5-3
△	44° 54' 00"	49° 33' 10"	43° 03' 10"
R	100.00'	115.00'	75.00'
T	41.32'	53.08'	29.58'
Ch	76.38'	96.39'	55.04'
Lc	78.37'	99.46'	56.36'



- Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- Existing Water Manhole/Valves to be Removed, See Water Plans
- Existing Utility/Drain Manhole Frames and Covers to Remain

CURVE DATA											
	U-1-1	U-1-2	U-1-3	U-1-4	H1-10	U-3-1	U-3-2	U-3-3	U-3-4	U-6-1	U-6-2
△	6° 40' 00"	56° 00' 00"	135° 58' 30"	107° 16' 50"	23° 14' 00"	25° 00' 00"	138° 45' 17.5"	40° 30' 20"	19° 35' 40"	136° 56' 50"	173° 03' 46"
R	329.82'	100.00'	60.00'	55.00'	2,148.59'	120.00'	50.00'	230.34'	75.00'	75.00'	75.00'
T	19.21'	53.17'	148.41'	74.71'	441.69'	26.60'	132.86	84.99'	12.95'	190.14'	1237.36'
Ch	38.35'	93.89	111.25'	88.58'	865.29'	51.95'	93.59'	159.47'	25.52'	139.54'	149.73'
Lc	38.38'	97.74'	142.39'	102.98	871.25'	52.36'	121.09'	162.84'	25.65'	179.26'	226.54'

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC

F.A.I Project No. IM-H1-1(234)

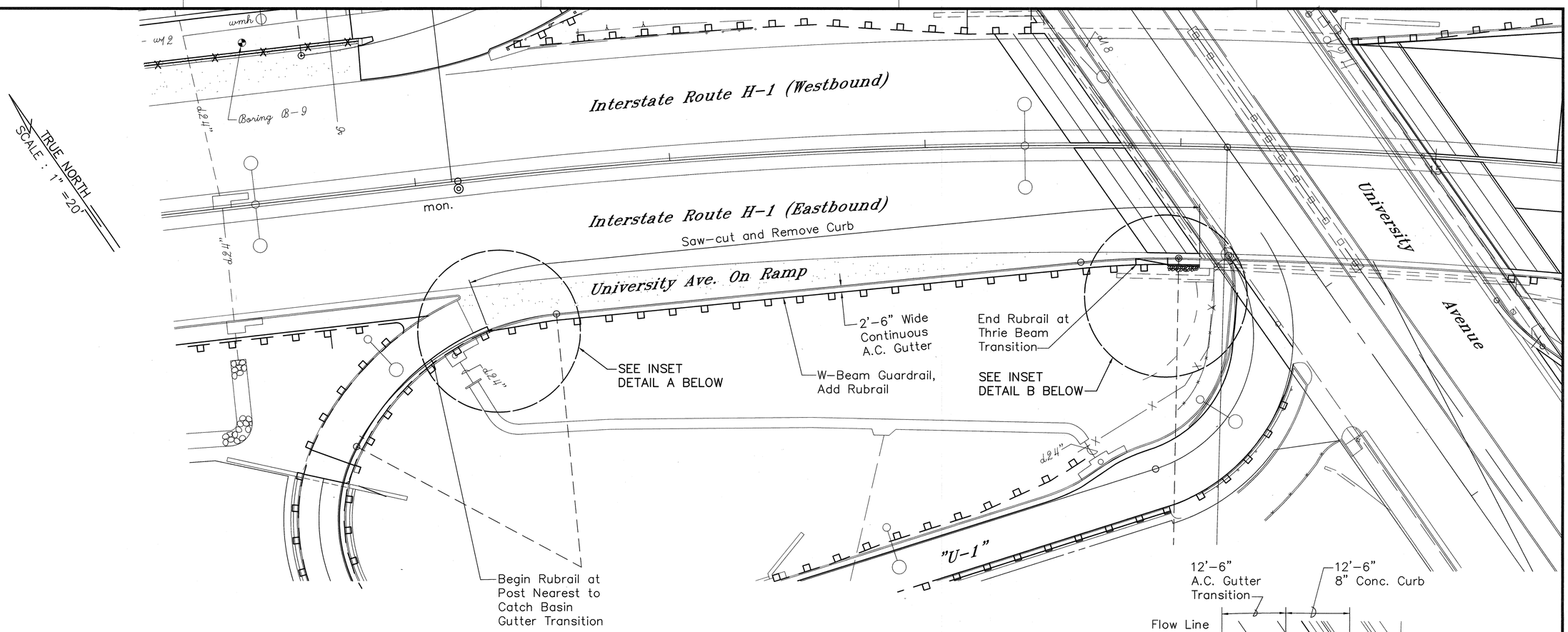
Scale: 1"=40' Date: June 1, 1999

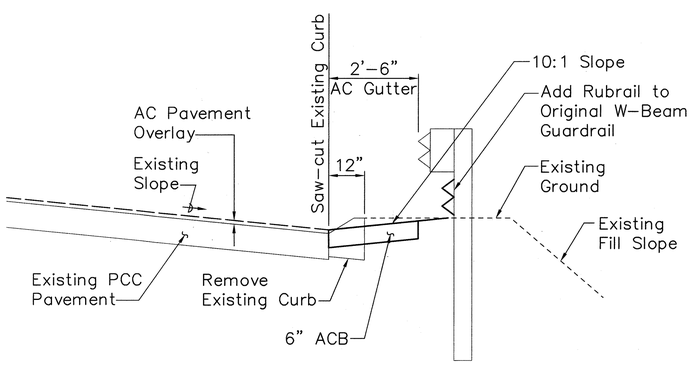
SHEET NO. R13 OF 34 SHEETS

ROTATED: 36° 56' 26.61" AT 0,0
DATE: 6/17/98
SCALE: 1" = 40'
FILE: 9815-20
PM: BST
OPER: SHA,*FAI
REVISED: 08/29/00

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK | No.

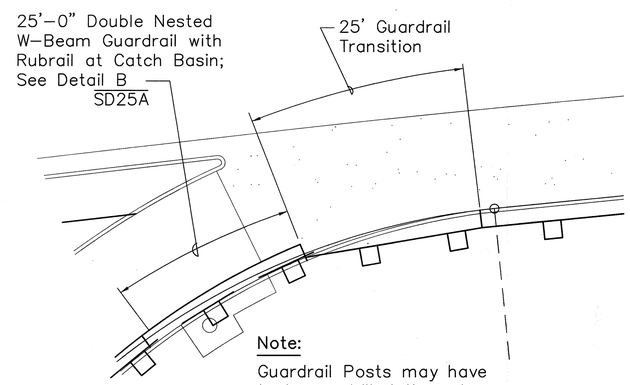
"AS-BUILT"





TYPICAL SECTION AT ACCELERATION LANE FOR RAMP U-1

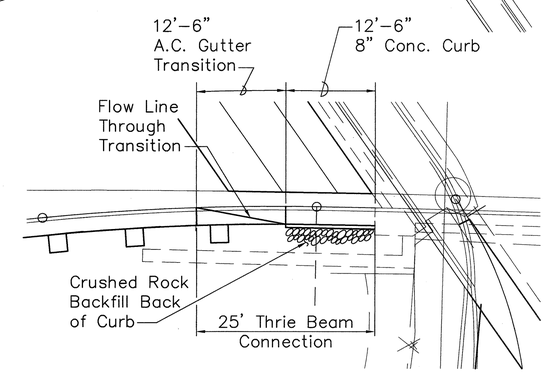
SCALE: 1/2" = 1'-0"



Note:
Guardrail Posts may have to be predrilled through A.C. Gutter in transition area.

INSET DETAIL A

SCALE: 1" = 10'



INSET DETAIL B

SCALE: 1" = 10'

DATE: 08/10/00
SCALE: 1 = 20
FILE: 9815-20B

PM: BST
OPER: BTY*FAI
REVISED: 08/29/00

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

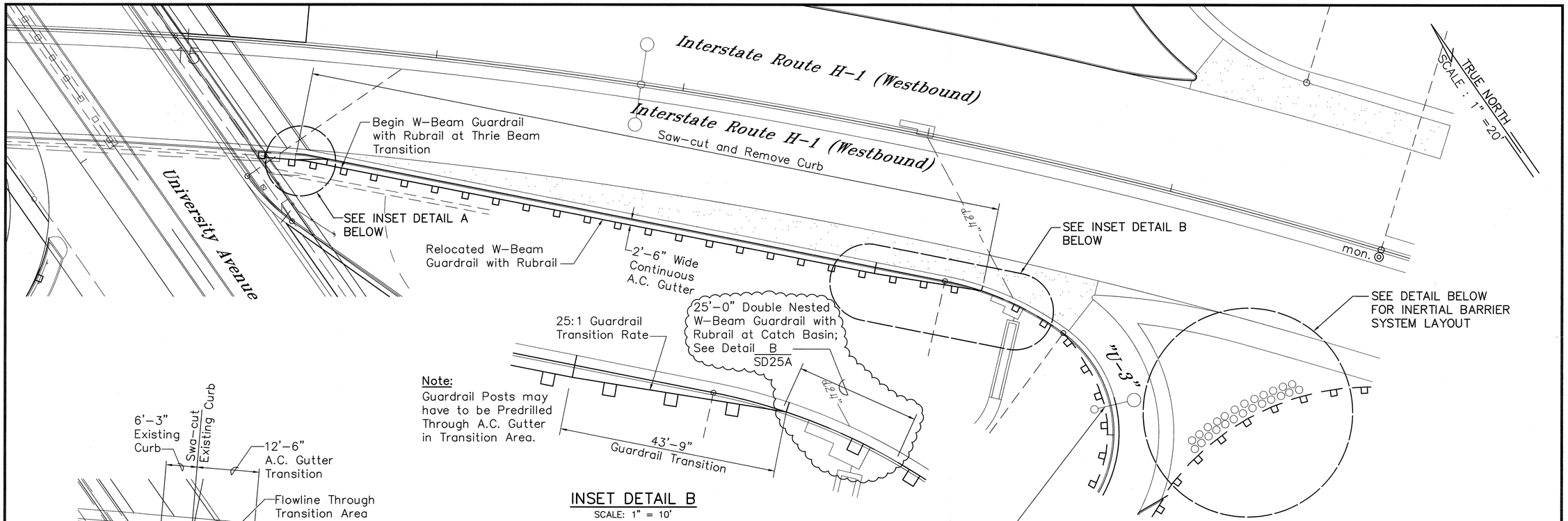
ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=20' Date: Aug. 10, 2000

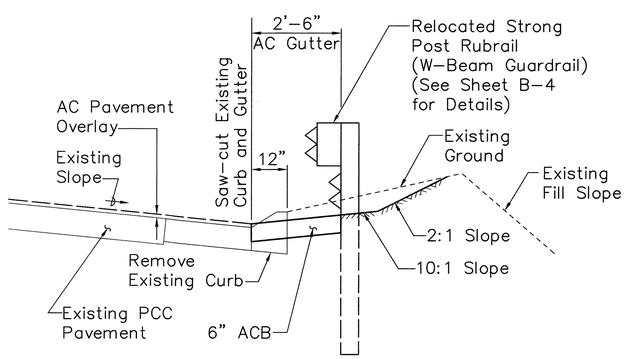
SHEET NO. R13A OF 34 SHEETS

CO 41 S-1



INSET DETAIL B
SCALE: 1" = 10'

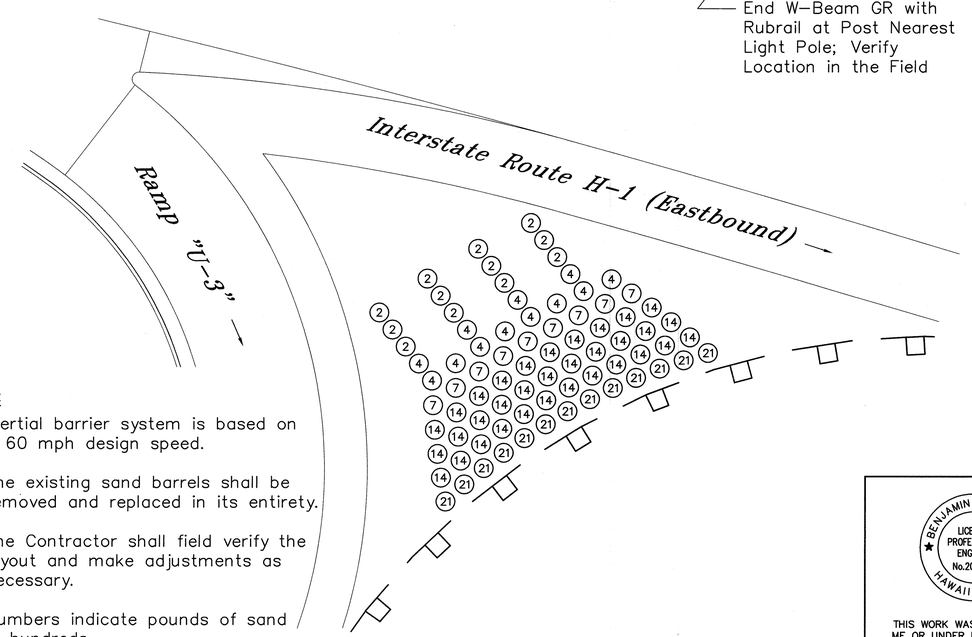
INSET DETAIL A
SCALE: 1" = 10'



TYPICAL SECTION AT DECELERATION LANE FOR RAMP U-3
SCALE: 1/2" = 1'-0"

Notes:

1. Inertial barrier system is based on a 60 mph design speed.
2. The existing sand barrels shall be removed and replaced in its entirety.
3. The Contractor shall field verify the layout and make adjustments as necessary.
4. Numbers indicate pounds of sand in hundreds.



INERTIAL BARRIER SYSTEM LAYOUT AT UNIVERSITY OFF RAMP U-3
SCALE: 1" = 10'

DATE: 08/10/00
SCALE: 1 = 20
FILE: 9815-20c

PM: BST
OPER: BTY,*FAI
REVISED: 09/28/00

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

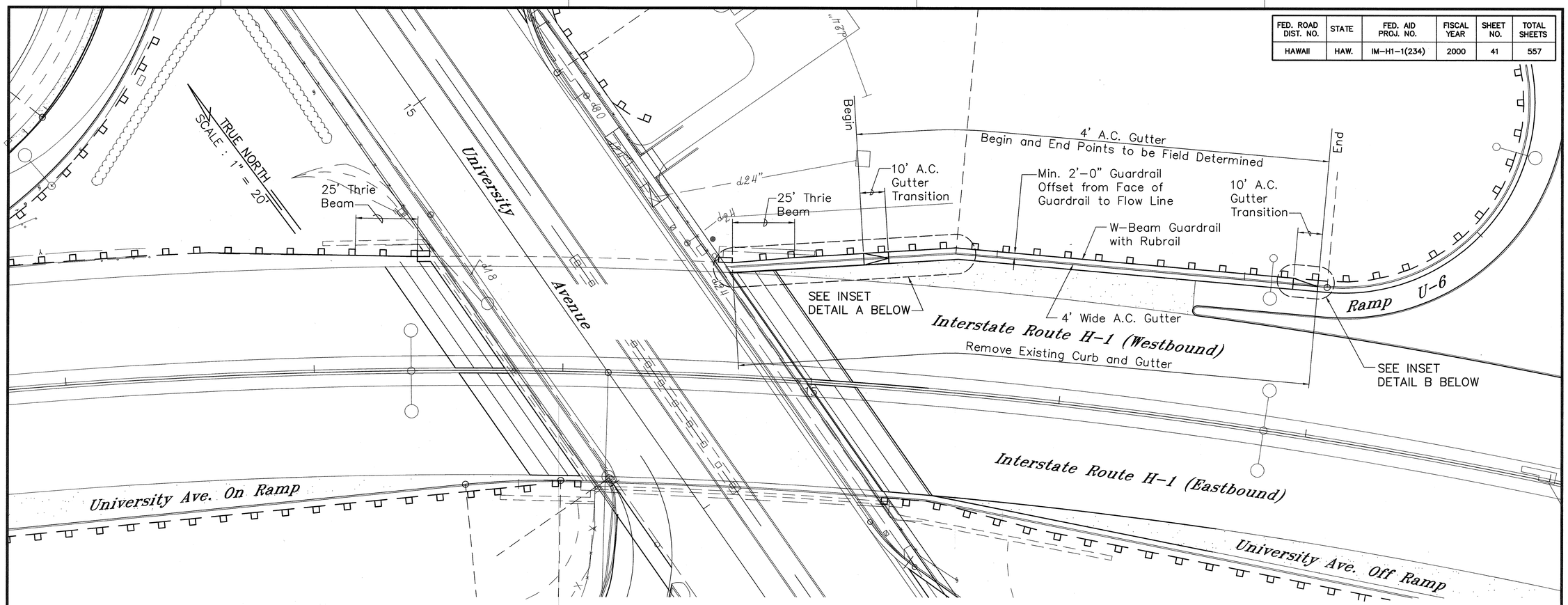
INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

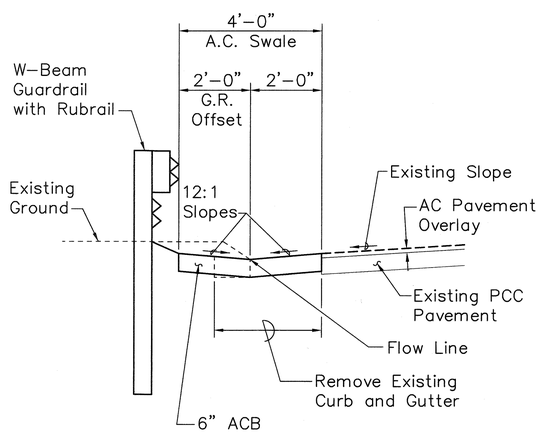
Scale: 1"=20' Date: Aug. 10, 2000

SHEET NO. R13B OF 34 SHEETS

CO 41 S-2

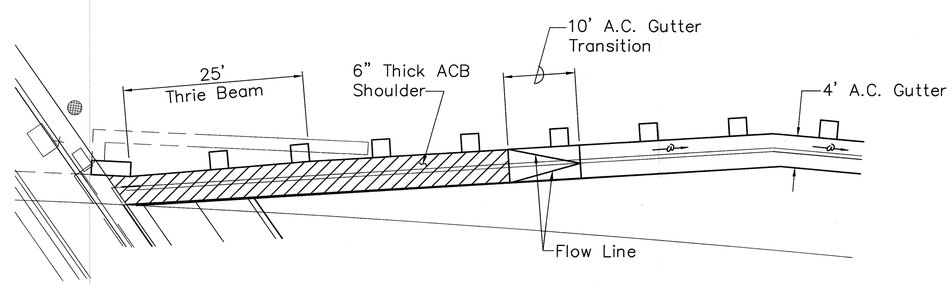
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	41	557





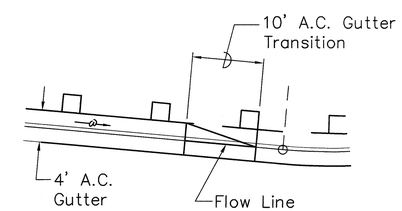
TYPICAL SECTION AT ACCELERATION LANE FOR RAMP U-6

SCALE: 1/2" = 1'-0"



INSET DETAIL A

SCALE: 1" = 10'



INSET DETAIL B

SCALE: 1" = 10'

ROTATED: 36° 56' 26.61" AT 0,0

DATE: 08/28/00
SCALE: 1" = 20'
FILE: 9815-20D

PM: BST
OPER: FAI
REVISED: 08/29/00

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN

NOTEBOOK No.

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

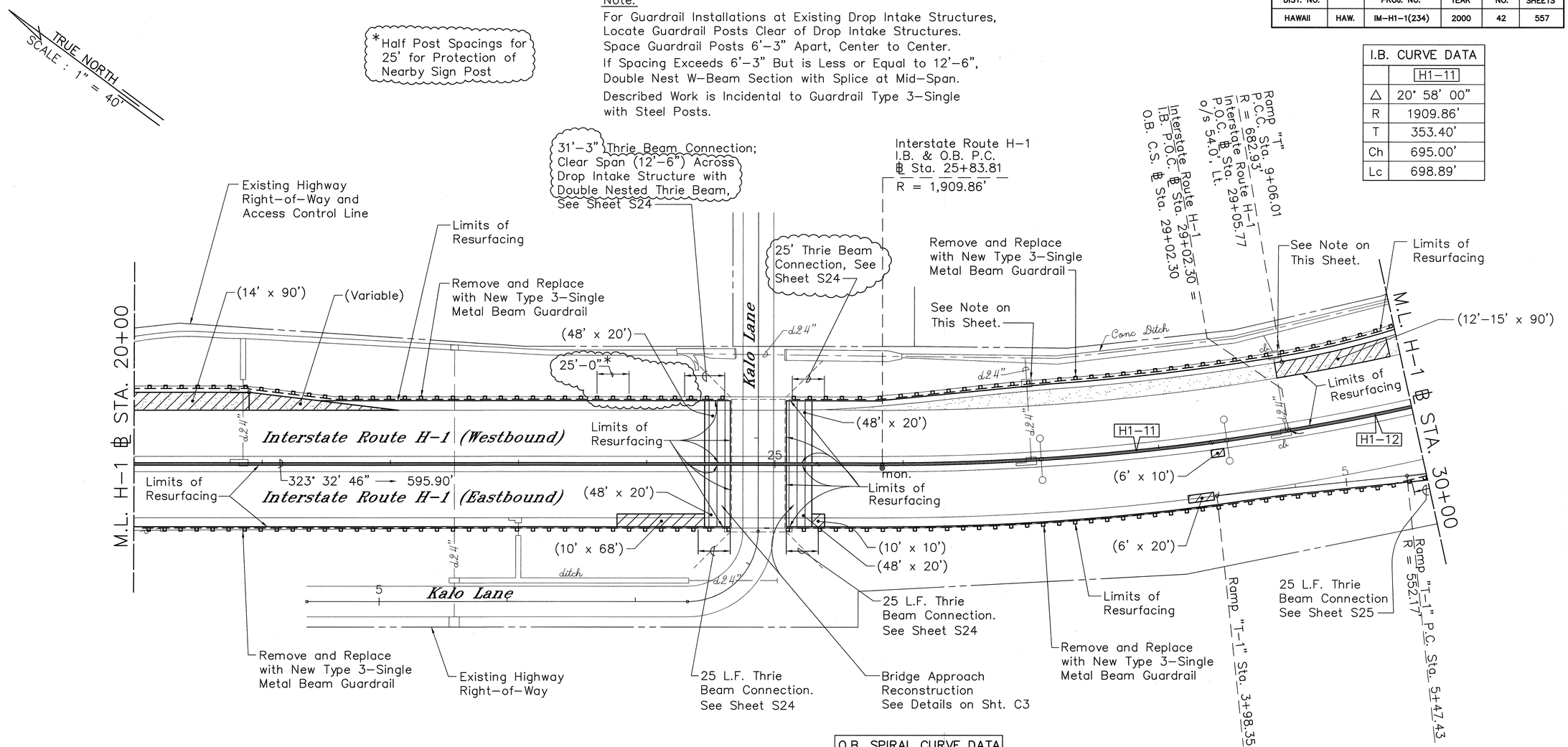
Scale: 1"=40' Date: June 1, 1999

SHEET NO. R13C OF 34 SHEETS

CO 41 S-3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	42	557

Note:
For Guardrail Installations at Existing Drop Intake Structures, Locate Guardrail Posts Clear of Drop Intake Structures. Space Guardrail Posts 6'-3" Apart, Center to Center. If Spacing Exceeds 6'-3" But is Less or Equal to 12'-6", Double Nest W-Beam Section with Splice at Mid-Span. Described Work is Incidental to Guardrail Type 3-Single with Steel Posts.



I.B. CURVE DATA	
	H1-11
Δ	20° 58' 00"
R	1909.86'
T	353.40'
Ch	695.00'
Lc	698.89'

O.B. SPIRAL CURVE DATA	
	H1-12
Ls	800.00
Dc	3.00
Θs	12° 00' 00"
P	13.94
L.C.	798.44
L.T.	534.57
S.T.	267.78
Yc	55.67
Xc	796.50

ROTATED: 53° 36' 00" AT 0,0
DATE: 6/17/98
SCALE: 1" 40'
FILE: 9815-21
PM: BST
OPER: SHA,*FAI,BTY
REVISED: 09/01/00

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTEBOOK	DESIGNED BY	
	CHECKED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R14 OF 34 SHEETS

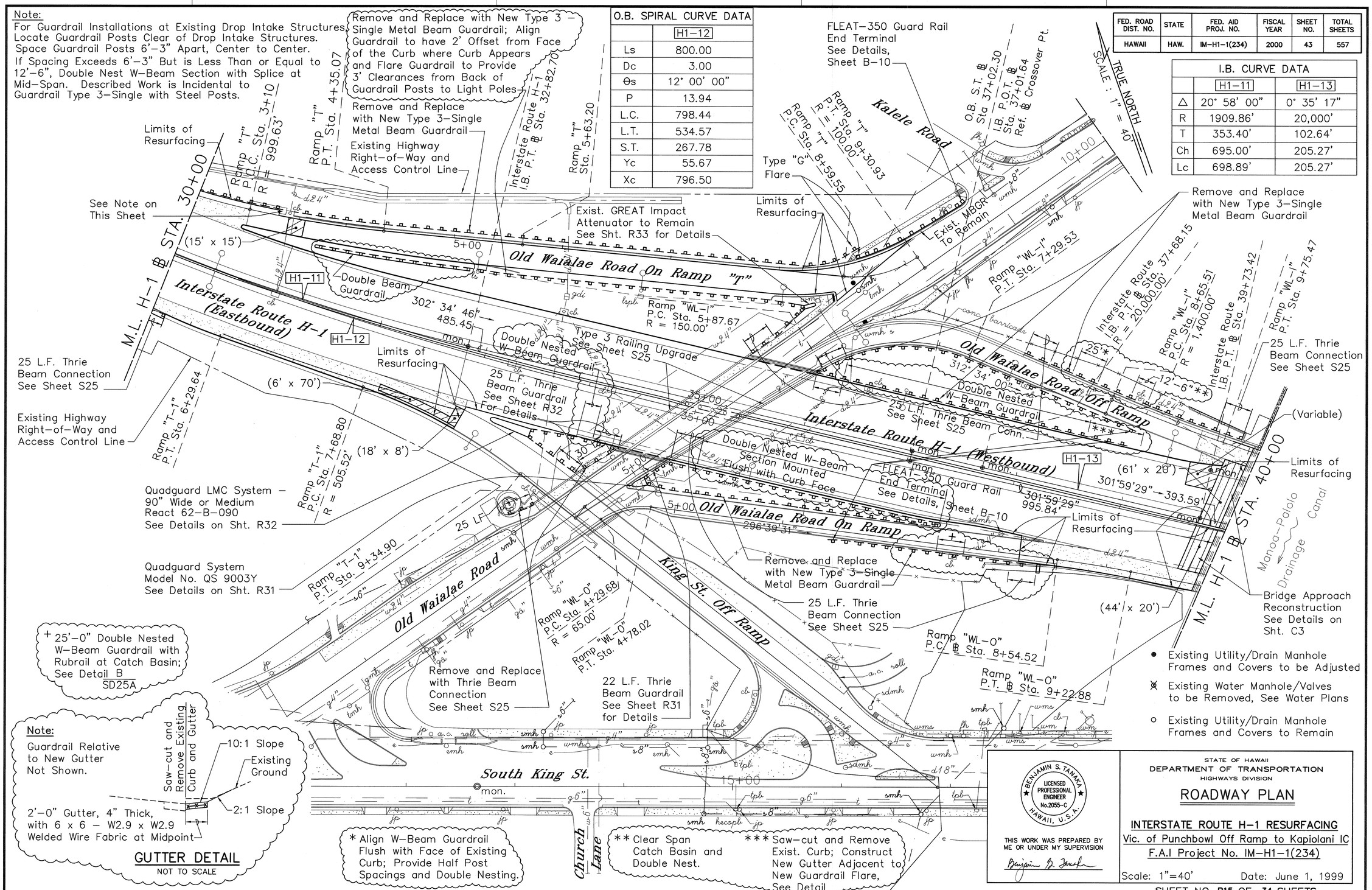
CO 42

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	43	557

Note:
For Guardrail Installations at Existing Drop Intake Structures, Locate Guardrail Posts Clear of Drop Intake Structures. Space Guardrail Posts 6'-3" Apart, Center to Center. If Spacing Exceeds 6'-3" But is Less Than or Equal to 12'-6", Double Nest W-Beam Section with Splice at Mid-Span. Described Work is Incidental to Guardrail Type 3-Single with Steel Posts.

O.B. SPIRAL CURVE DATA	
	H1-12
Ls	800.00
Dc	3.00
Θs	12° 00' 00"
P	13.94
L.C.	798.44
L.T.	534.57
S.T.	267.78
Yc	55.67
Xc	796.50

I.B. CURVE DATA		
	H1-11	H1-13
Δ	20° 58' 00"	0° 35' 17"
R	1909.86'	20,000'
T	353.40'	102.64'
Ch	695.00'	205.27'
Lc	698.89'	205.27'



BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC

F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R15 OF 34 SHEETS

CO 43

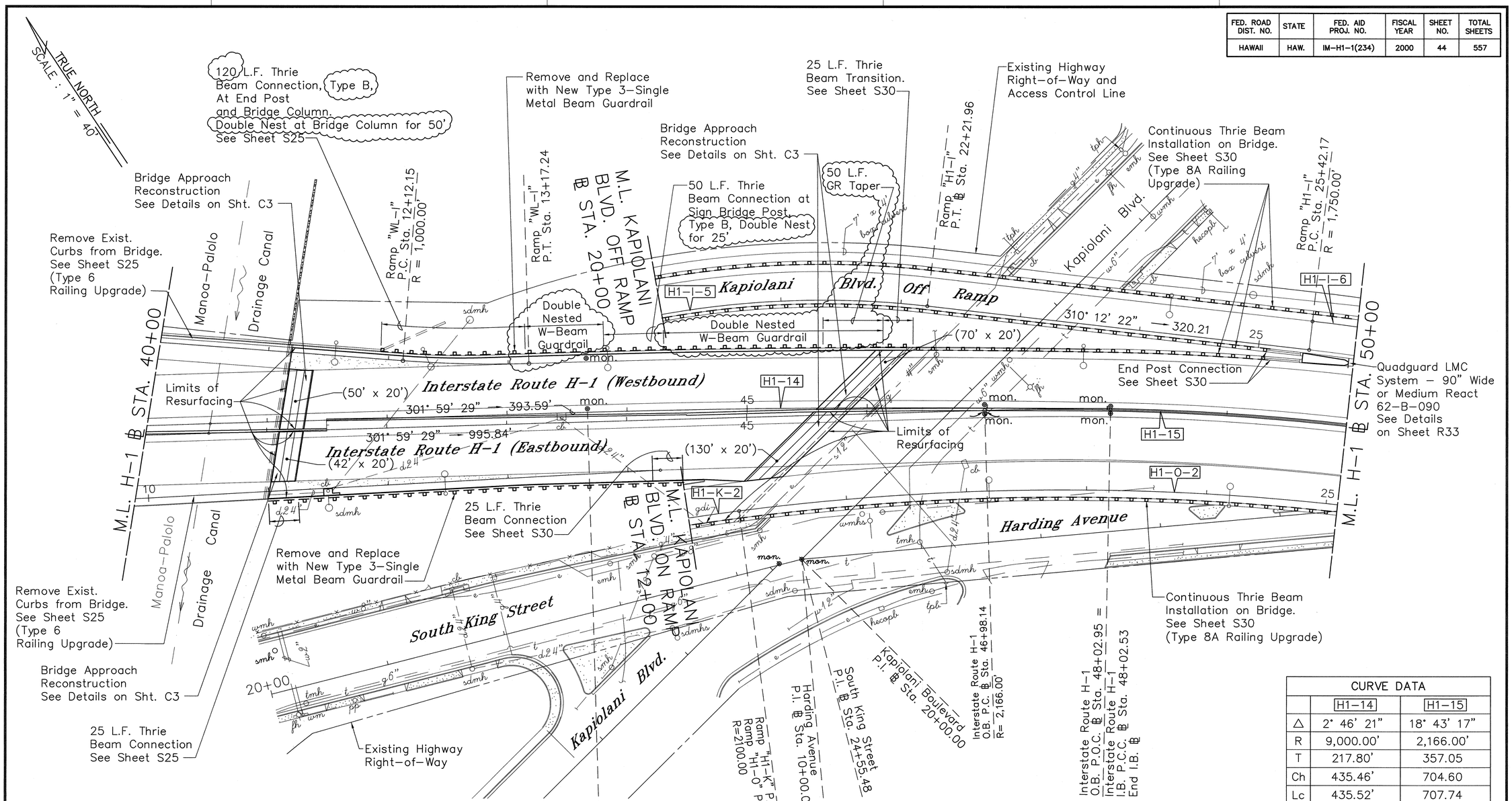
ROTATED: 19° 26' 00" AT 0,0

PM: BST
OPER: SHA,*FAI,BTY
REVISED: 10/02/00

DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-22

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	44	557



CURVE DATA				
	H1-1-5	H1-1-6	H1-K-2	H1-0-2
△	49° 30' 00"	10° 30' 24"	2° 22' 19"	24° 27' 56"
R	760.00'	1750.00'	2100.00'	2100.00'
T	350.36'	160.91'	135.28'	455.29'
Ch	636.36'	320.46'	270.01'	889.91'
Lc	656.59'	320.91'	270.20'	896.71'

CURVE DATA		
	H1-14	H1-15
△	2° 46' 21"	18° 43' 17"
R	9,000.00'	2,166.00'
T	217.80'	357.05
Ch	435.46'	704.60
Lc	435.52'	707.74

ROTATED: 33° 45' 19.41" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-23
PM: BST
OPER: SHA*FAI
REVISED: 09/05/00

ORIGINAL PLAN — SURVEY PLOTTED BY / DRAWN BY / TRACED BY / DESIGNED BY / QUANTITIES BY / CHECKED BY — DATE
NOTEBOOK No.

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

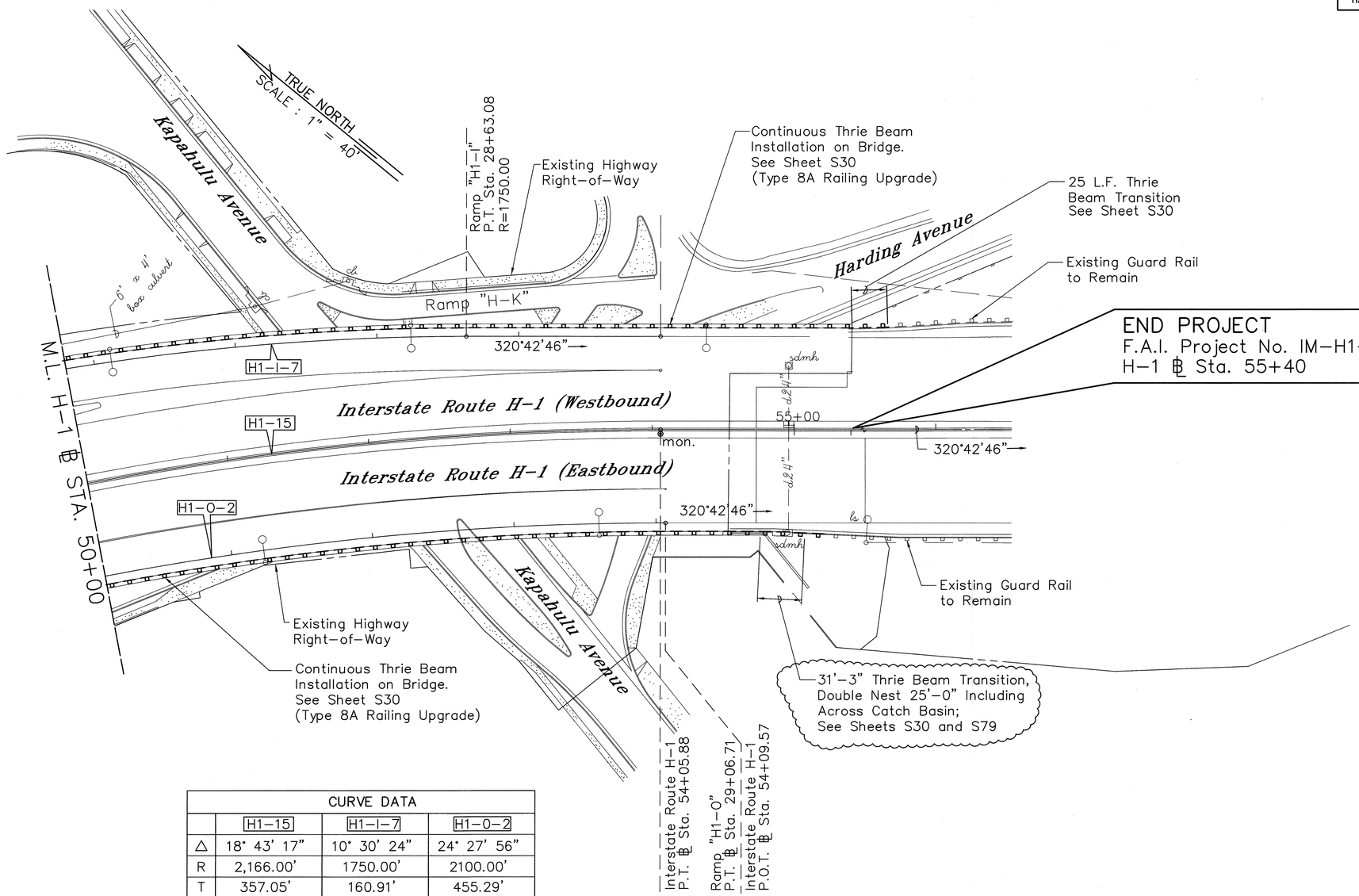
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R16 OF 34 SHEETS

CO 44

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	45	557



END PROJECT
F.A.I. Project No. IM-H1-1(234)
H-1 ℄ Sta. 55+40

CURVE DATA			
	H1-15	H1-I-7	H1-0-2
△	18° 43' 17"	10° 30' 24"	24° 27' 56"
R	2,166.00'	1750.00'	2100.00'
T	357.05'	160.91'	455.29'
Ch	704.60'	320.46'	889.91
Lc	707.74	320.91'	896.71

ROTATED: 50° 45' 59.96" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-24
PM: BST
OPER: SHA,*FAI
REVISED: 10/02/00

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

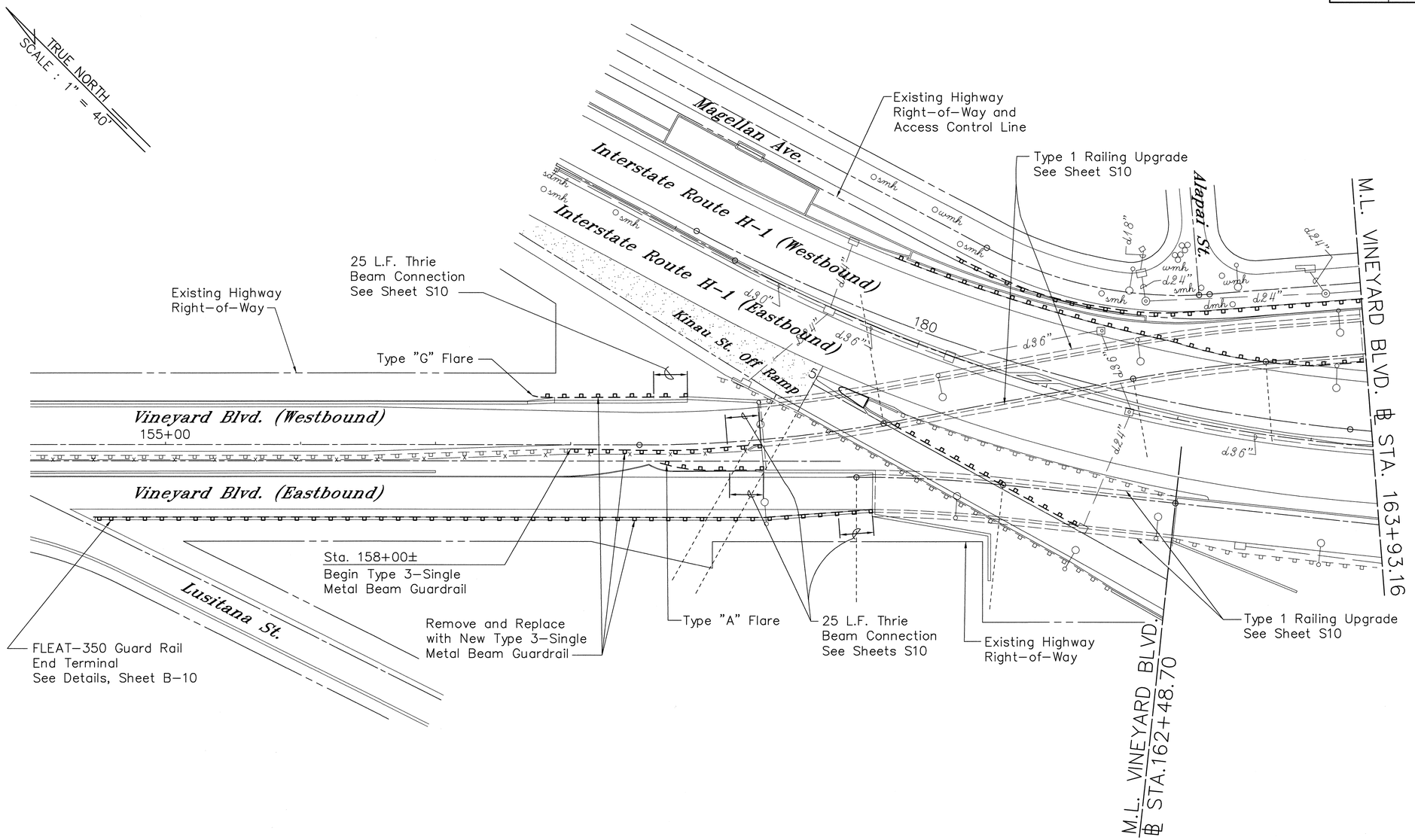
INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R17 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	46	557



ROTATED: 45° 05' 34.4" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-26
PM: BST
OPER: SHA,*FAI
REVISED: 05/12/99

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

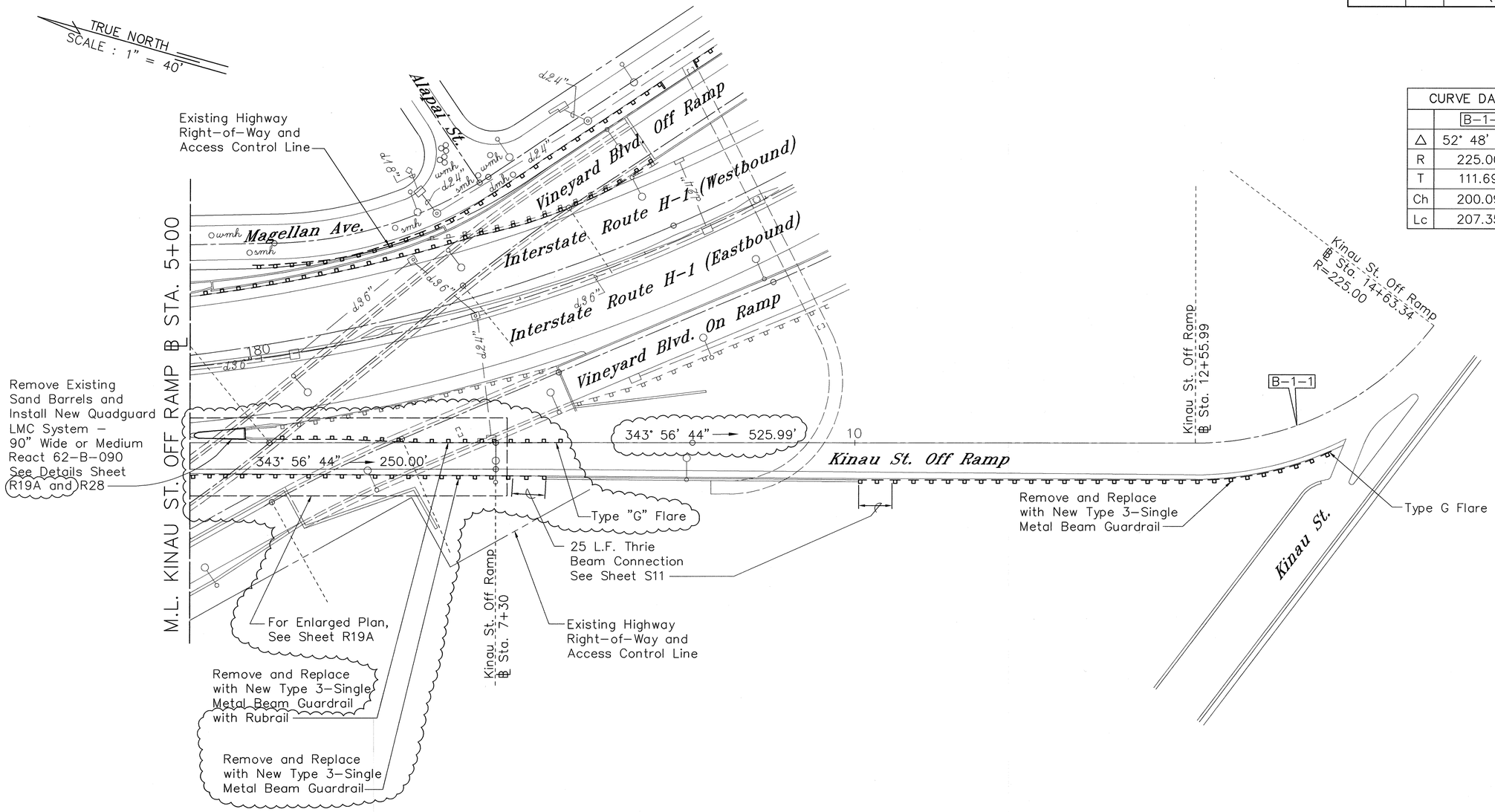
ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R18 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	47	557



CURVE DATA	
	B-1-1
Δ	52° 48' 00"
R	225.00'
T	111.69'
Ch	200.09'
Lc	207.35'

ROTATED: 74° 11' 4.08" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-27
PM: BST
OPER: SHA,BTY,*FAI
REVISED: 08/23/99

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTEBOOK	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

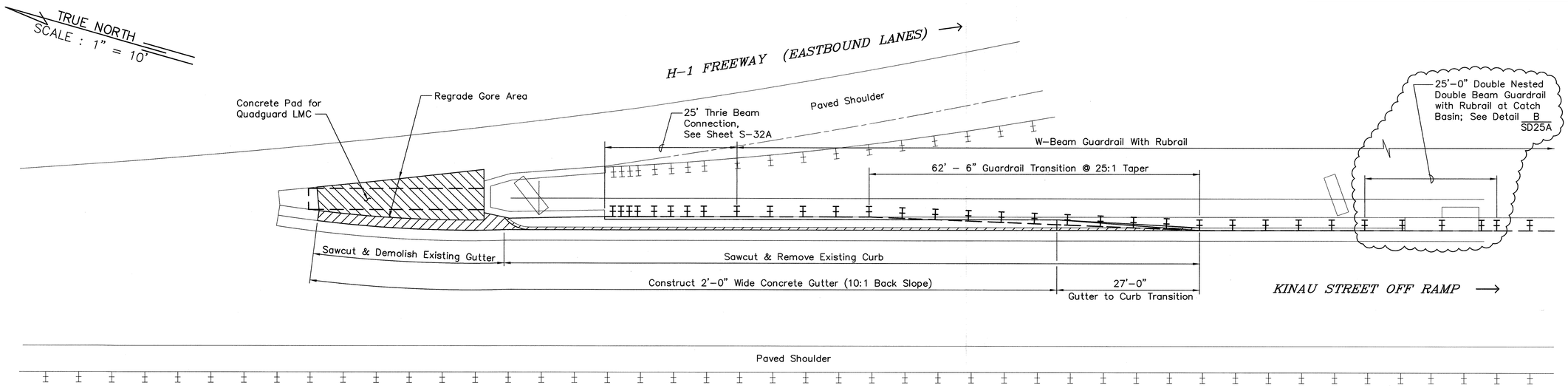
ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

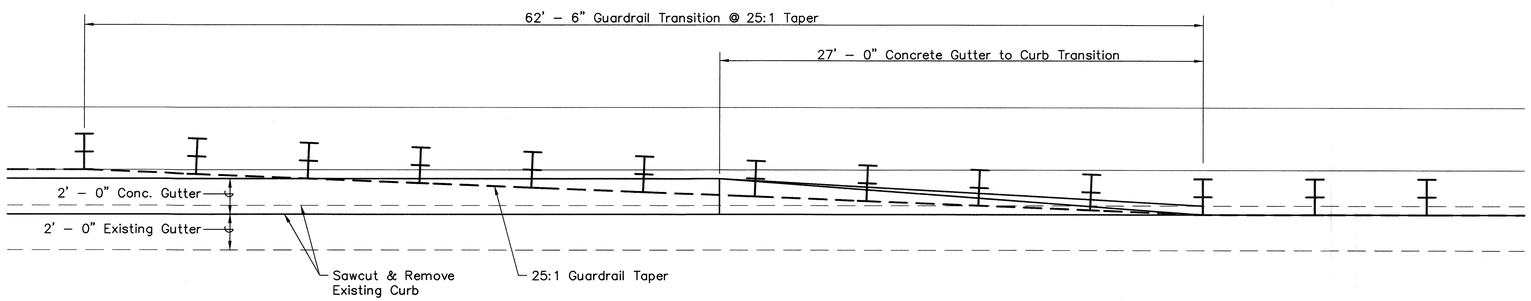
SHEET NO. R19 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	47S-1	557



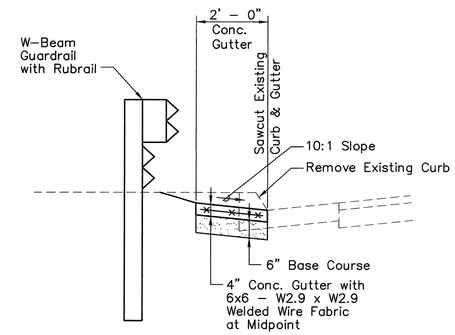
ENLARGED PLAN

SCALE: 1" = 10'



GUTTER/GUARDRAIL TRANSITION DETAIL

SCALE: 1/4" = 1' - 0"



TYPICAL SECTION AT KINAU ST. OFF RAMP

SCALE: 1/2" = 1' - 0"

GRAPHIC SCALES:

1/4" = 1'-0" — 4 2 0 4 8 — SCALE IN FEET

1/2" = 1'-0" — 2 1 0 2 4 — SCALE IN FEET

1" = 10' — 10 5 0 10 20 — SCALE IN FEET

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1" = 10'-0" Date: June 1, 999

SHEET NO. R19A OF 34 SHEETS

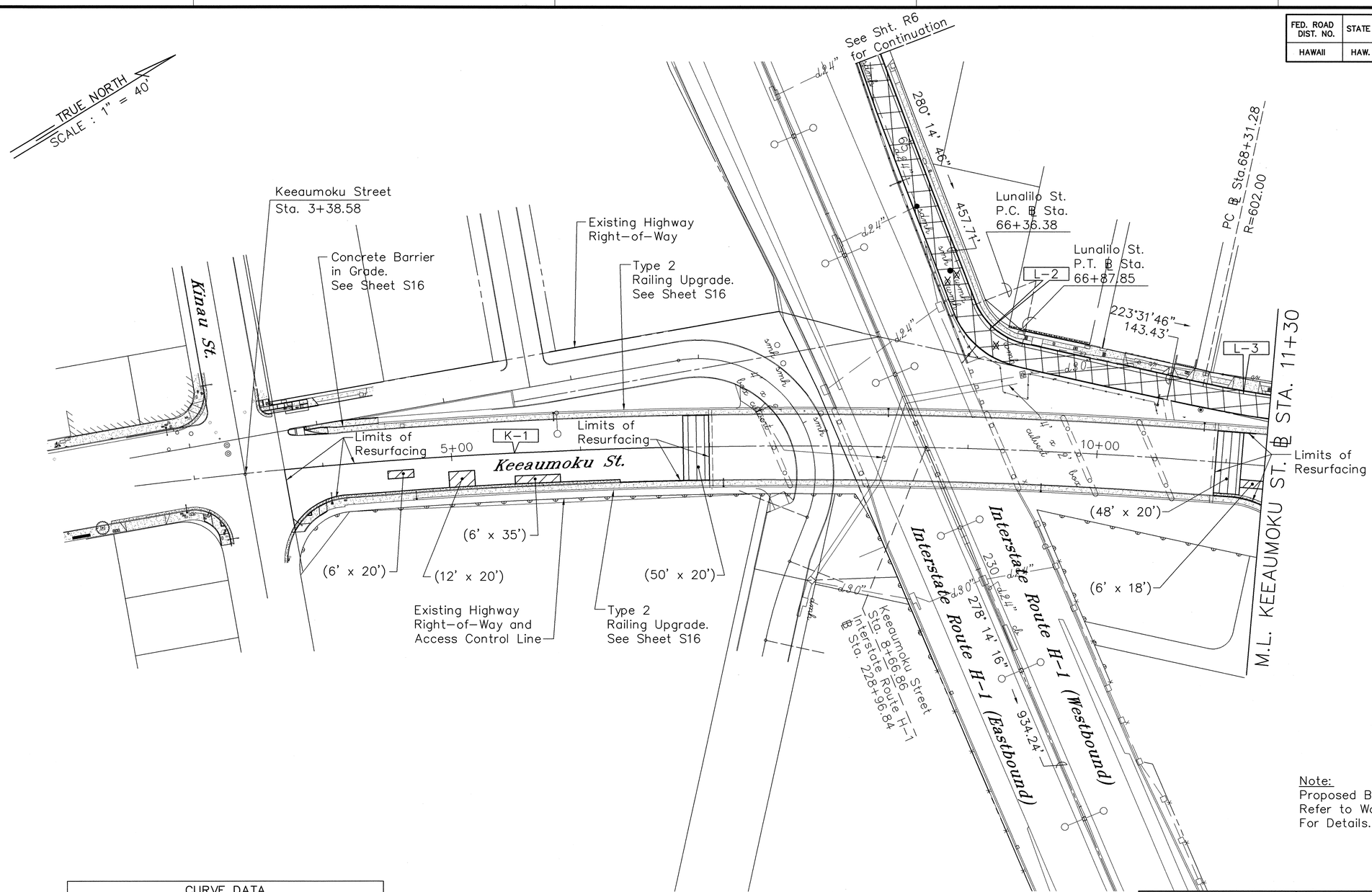
CO 47 S-1

PM: BST/TCL
OPER: *FAI,BTY
REVISED: 09/28/00

DATE: 08/16/00
SCALE: 1" = 10'
FILE: 9815-247

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	48	557



Note:
Proposed BWS Water Main(s) Not Shown. Refer to Water Plans, Sheet(s) W14 & W15 For Details.

CURVE DATA			
	K-1	L-2	L-3
Δ	16° 41' 00"	56° 43' 00"	7° 17' 51"
R	4200.00'	52.00'	602.00'
T	615.83'	28.07'	38.39'
Ch	1218.64'	39.40'	76.62'
Lc	1222.95'	51.47'	76.67'

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

Vic. of Punchbowl Off Ramp to Kapiolani IC

F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R20 OF 34 SHEETS

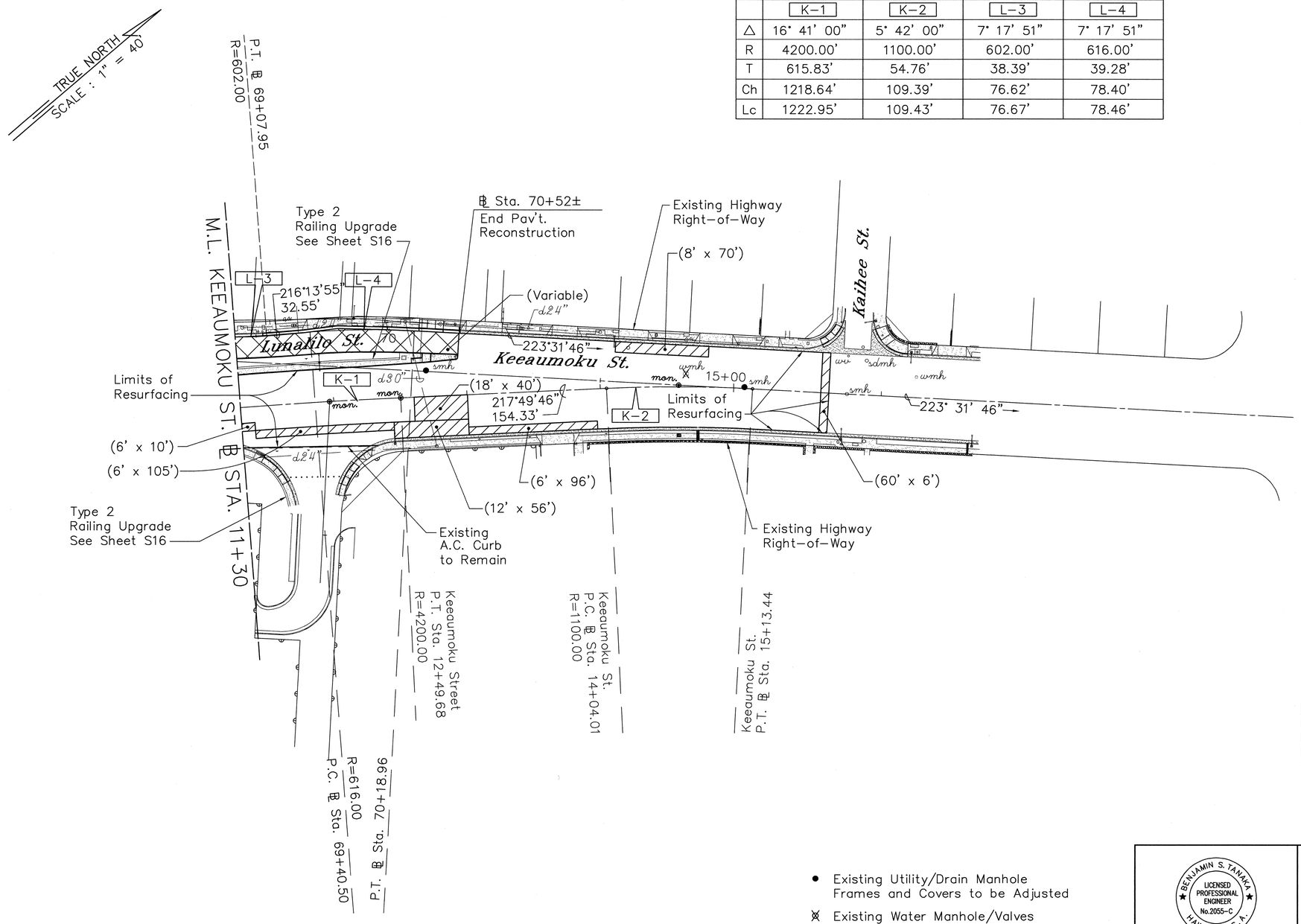
ROTATED: (-)58° 39' 47.46" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-28
PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLANS | SURVEY PLOTTED BY ____ DATE | DRAWN BY ____ | TRACED BY ____ | DESIGNED BY ____ | QUANTITIES BY ____ | CHECKED BY ____ | NOTEBOOK No. ____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	49	557

CURVE DATA

	K-1	K-2	L-3	L-4
△	16° 41' 00"	5° 42' 00"	7° 17' 51"	7° 17' 51"
R	4200.00'	1100.00'	602.00'	616.00'
T	615.83'	54.76'	38.39'	39.28'
Ch	1218.64'	109.39'	76.62'	78.40'
Lc	1222.95'	109.43'	76.67'	78.46'



Note:
Proposed BWS Water Main Not Shown.
Refer to Water Plans, Sheet W16
For Details.

- ● Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R21 OF 34 SHEETS

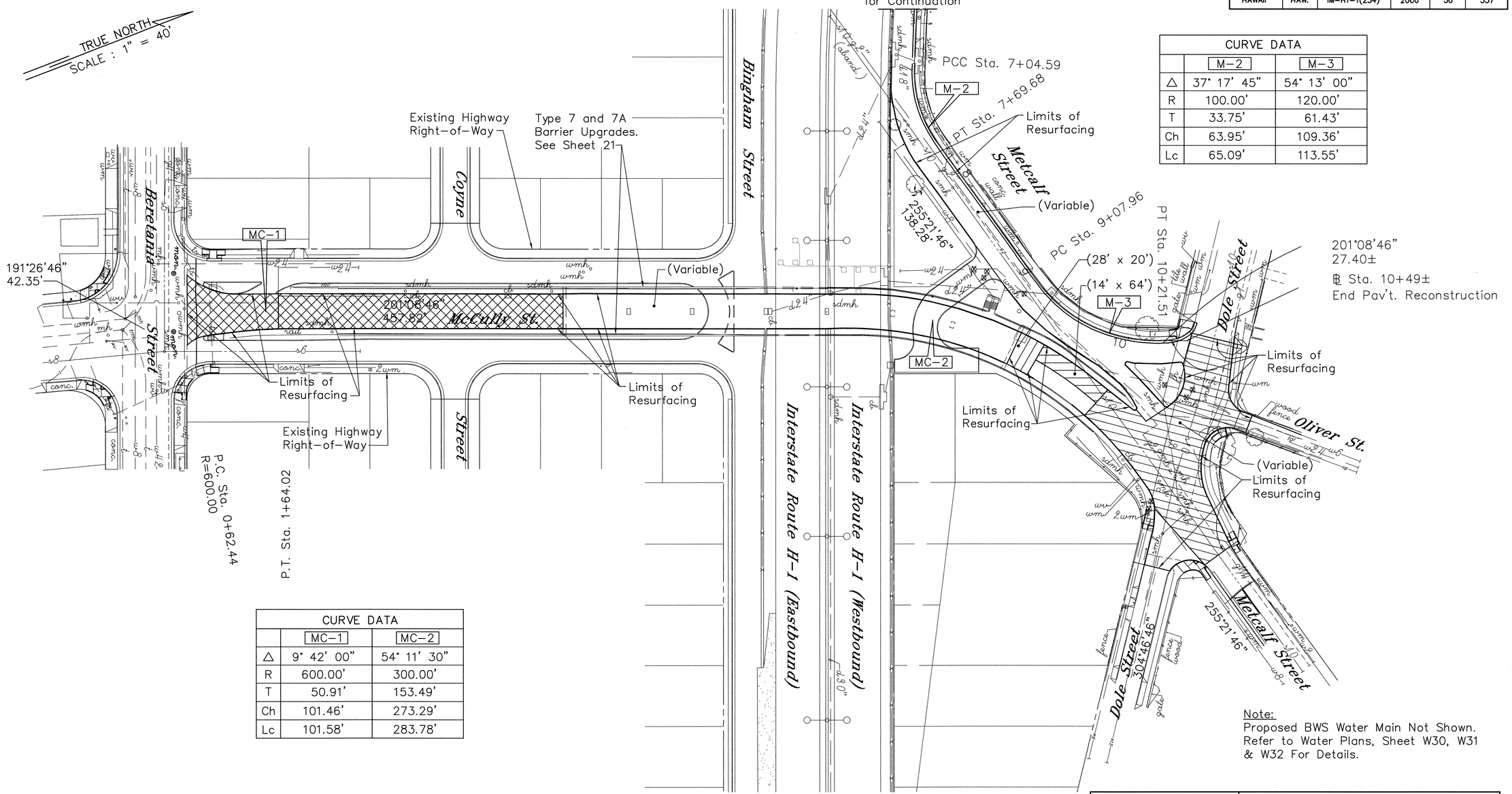
ROTATED: (-)49° 21' 44.70"
AT 0,0

DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-29

PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
NOTEBOOK
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	50	557



CURVE DATA		
	M-2	M-3
Δ	37° 17' 45"	54° 13' 00"
R	100.00'	120.00'
T	33.75'	61.43'
Ch	63.95'	109.36'
Lc	65.09'	113.55'

CURVE DATA		
	MC-1	MC-2
Δ	9° 42' 00"	54° 11' 30"
R	600.00'	300.00'
T	50.91'	153.49'
Ch	101.46'	273.29'
Lc	101.58'	283.78'

Note:
Proposed BWS Water Main Not Shown. Refer to Water Plans, Sheet W30, W31 & W32 For Details.

- • Existing Utility/Drain Manhole Frames and Covers to be Adjusted
- ⊗ Existing Water Manhole/Valves to be Removed, See Water Plans
- ○ Existing Utility/Drain Manhole Frames and Covers to Remain

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No.2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

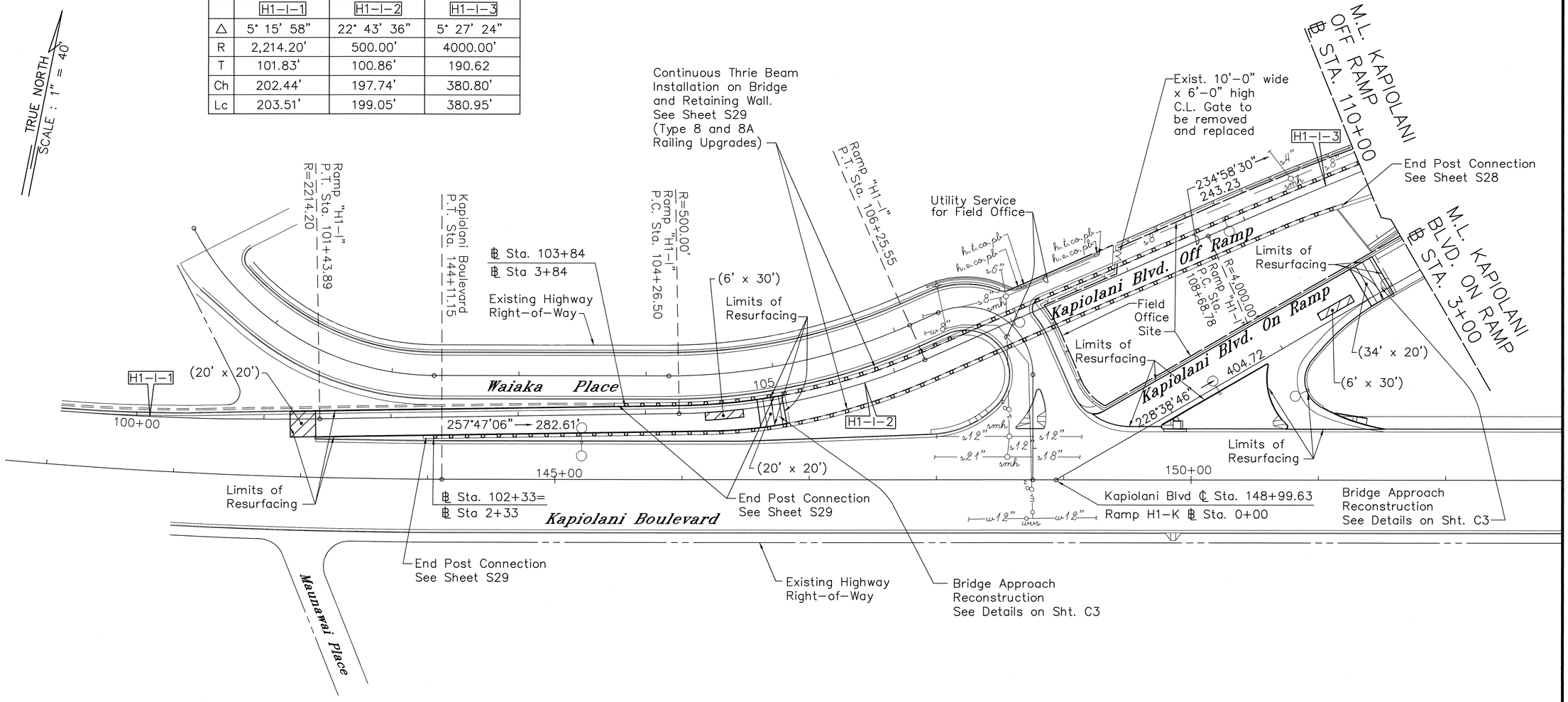
SHEET NO. R22 OF 34 SHEETS

ROTATED: (-)68° 48' 00" AT 0,0
DATE: 6/17/98 PM: BST
SCALE: 1 = 40 OPER: SHA,*FAI
FILE: 9815-30 REVISED: 05/11/99

		DATE
ORIGINAL PLAN	SURVEY PLOTTED BY	
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	51	557

CURVE DATA			
	H1-I-1	H1-I-2	H1-I-3
Δ	5° 15' 58"	22° 43' 36"	5° 27' 24"
R	2,214.20'	500.00'	4000.00'
T	101.83'	100.86'	190.62
Ch	202.44'	197.74'	380.80'
Lc	203.51'	199.05'	380.95'



ROTATED: (-)11° 14' 0.27" AT 0,0

DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-31

PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING

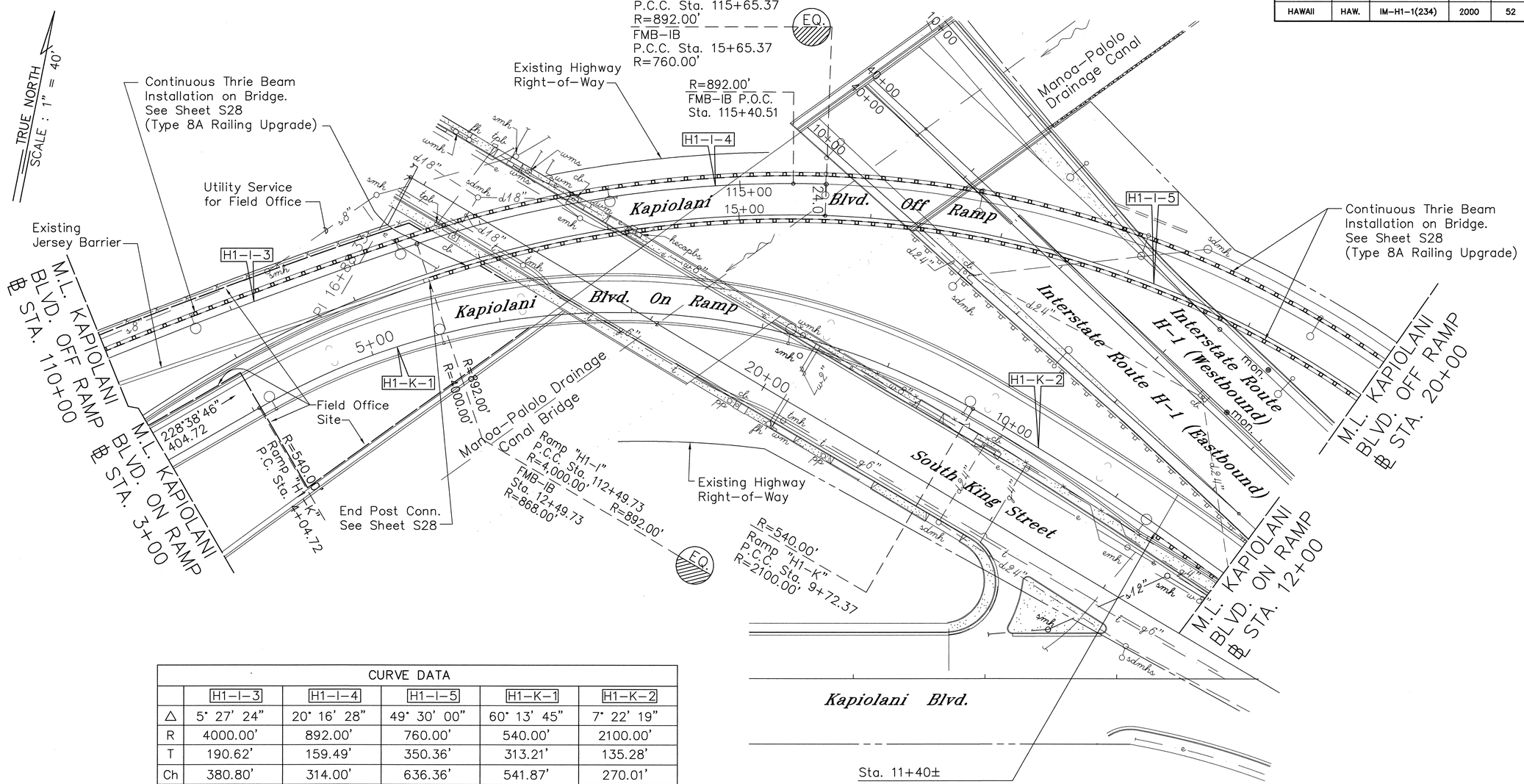
Vic. of Punchbowl Off Ramp to Kapiolani IC

F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R23 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	52	557



CURVE DATA					
	H1-I-3	H1-I-4	H1-I-5	H1-K-1	H1-K-2
Δ	5° 27' 24"	20° 16' 28"	49° 30' 00"	60° 13' 45"	7° 22' 19"
R	4000.00'	892.00'	760.00'	540.00'	2100.00'
T	190.62'	159.49'	350.36'	313.21'	135.28'
Ch	380.80'	314.00'	636.36'	541.87'	270.01'
Lc	380.95'	315.64'	656.59'	567.65	270.20'

ROTATED: (-)11° 14' 0.27" AT 0,0
DATE: 6/17/98
SCALE: 1 = 40
FILE: 9815-32
PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

BENJAMIN S. TANAKA LICENSED PROFESSIONAL ENGINEER No.2055-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

Scale: 1"=40' Date: June 1, 1999

SHEET NO. R24 OF 34 SHEETS